DOCUMENT RESUME

ED 086 941 CG 008 659

AUTHOR	Kleve, Gerald L.; And Others
TITLE	Career Education in the Elementary School.
INSTITUTION	Minnesota State Dept. of Education, St. Paul. Div. of Instruction.
SPONS AGENCY	Bureau of Elementary and Secondary Education (DHEW/OE), Washington, D.C.
PUB DATE	74
NOTE	84p.
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	*Career Education; Educational Objectives; *Elementary Education; *Elementary School Guidance; Guidance Programs; Program Content; *Program Descriptions; *Publications
IDENTIFIERS	*Elementary and Secondary Education Act Title III; ESEA Title III

ABSTRACT

This monograph attempts to answer some of the most commonly asked questions concerning career education: (1) What is career education?; (2) Why do we need career education?; (3) When and where does career education take place?; Also outlined are the goals of elementary education and how the development of career education awareness can fit into an elementary school curriculum. Some career awareness activities are included, as well as a discussion on career awareness and elementary school guidance in perspective, descriptions of some exemplary career education projects, and a selected career education bibliography. (LP)

ED 086941

career education in the elementary school

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

MINNESOTA
DEPARTMENT OF EDUCATION

008 659

ED 086941

XXXIII-A-37

Career Education in the Elementary School

Contributors

Gerald L. Kleve
G. Dean Miller
William Stock
Julius H. Kerlan

Prepared with funds made available under the provisions of the Elementary and Secondary Education Act of 1965, Title III

ELEMENTARY SCHOOL UNIT
and
PUPIL PERSONNEL SERVICES SECTION

DIVISION OF INSTRUCTION
MINNESOTA DEPARTMENT OF EDUCATION
St. Paul, Minnesota 55101
1974

TABLE OF CONTENTS

Chapter		Page
	Foreword	v
1	Carrer Education. What? Why? When? Where? .... Gerald L. Kleve	1
2	Goals of Elementary Education	9
3	The Elementary School Curriculum and Career Education Awareness Development	11
4	Elementary Career Awareness Needs In Minnesota	20
5	Career Awareness and Elementary School Guidance In Perspective .... G. Dean Miller	25
6	Exemplary Career Education Projects In Minnesota .... William Stock	61
7	Selected Career Education Bibliography .... Julius H. Kerlan	75

Cover: The photographs illustrate two career education concepts suggested for children — observing the parent at work as with the Indian child watching his father during ricing, and having a "hands on" experience with tools and material such as the farm boy helping his mother (although riding such equipment behind a tractor is now discouraged for safety reasons). Family farming is an occupation which has always provided such opportunities in a natural way.

Photo courtesy of the Minnesota Historical Society.

FOREWORD

The present resurgence of interest in career education, particularly at the elementary school level, has stimulated a variety of reactions, comments and interest by elementary educators in Minnesota and throughout the nation.

Some educators look to career education as the change agent needed to revive our total educational system. Others, parents and educators interpret projected efforts in career education as an attempt to track children in occupational areas starting in the elementary school. Many elementary educators are asking penetrating questions on how the proponents of career education see this new thrust affecting present on-going elementary programs. Still other elementary educators suggest that comprehensive instructional programs have, in fact, integrated many career education awareness concepts being emphasized presently, in the curriculum for years.

There seem to be some good reasons for the concern and confusion expressed by some educators and parents about career education in the elementary school. One major problem appears to be the variety of terms being verbalized without a clear definition of any. Some ask, "What is the difference between career education, vocational education, career development, career guidance, career orientation and occupational awareness, to mention a few?" Another major factor contributing to the problem is the unfamiliarity by both educators and parents with the significant objectives of career education programs in the elementary, secondary, and post-secondary school programs. How does all of this fit together into some type of meaningful plan that will provide maximum benefits and opportunities for each student?

This monograph has not been prepared as a comprehensive resource for answering "the 100 most common questions asked about career education in the elementary school." It is not intended to be the "cookbook model" for implementing career education awareness concepts in the elementary program. Rather, it is intended to familiarize its readers with some selected key concepts of career education and stimulate further study and development of career education awareness concepts in the elementary school program. With this broad goal in mind, this monograph concentrates on the following areas:

1. Career education! What? Why? When? Where?
2. Goals of elementary education and their relationship to career education awareness.

3. The elementary school curriculum and career education awareness development.
4. Elementary career awareness needs in Minnesota.
5. Career awareness and elementary school guidance in perspective.
6. Identification of exemplary career education projects in Minnesota.
7. A selected career education bibliography.

The development of this monograph has been assisted by contributions, ideas and comments from numerous staff members in the Minnesota Department of Education.

Director, Elementary Education

CHAPTER ONE

CAREER EDUCATION

Gerald L. Kleve*

Four basic questions concerning career education are frequently asked whether one is reviewing some of the voluminous literature in the field of career education, or in discussion with a parent or educator. The four questions most frequently asked are: 1) What is career education? 2) Why do we need career education? 3) When does career education take place? and 4) Where does career education happen?

Career Education — What?

The numerous definitions of career education found in the literature have a number of common components and characteristics. Some of these include: 1) a distinction between career education and vocational education, 2) career education is continuous from early elementary grades through adulthood, 3) career education is for all students, 4) career education is comprehensive in scope, found at all levels and in all subject areas, 5) career education includes awareness, exploration, orientation and preparation for the world of work, and 6) career education assists self-development.

The California Model for Career Development defines career education as: "A comprehensive educational program focused on careers which begin in grade one or earlier and continues through the adult years. Career education not only provides job information and skill development, but also helps students to develop attitudes about personal, psychological, social and economic significance of work."[1]

The U.S. Office of Education identifies seven key concepts of career education:

1. Preparation for successful working careers shall be a key objective of all education.
2. Every teacher in every course that has career relevance will emphasize the contribution that subject matter can make to a successful career.

*Gerald L. Kleve is Director, Elementary Education, Division of Instruction, Minnesota Department of Education.

3. "Hands on" occupationally oriented experiences will be utilized as a method of teaching and motivating the learning of abstract academic content.
4. Preparation for careers will encompass the mutual importance of work attitudes, human relations skills, orientation to the nature of the workaday world, exposure to alternative career choices, and the acquisition of actual job skills.
5. Learning will not be reserved for the classroom but learning environments for career education will also be identified in the home, the community, and employing establishments.
6. Beginning in early childhood and continuing through the regular school years, allowing the flexibility for a youth to leave for experience and return to school for further education, including opportunity for upgrading and continued refurbishing for adult workers and including productive use of leisure time and the retirement years, career education will seek to extend its time horizons without beginning and without end.
7. Career education is a basic and pervasive approach to all education, but it in no way conflicts with other legitimate education objectives such as citizenship, culture, family responsibility, and basic education.[2]

A position paper on career education adopted by the Minnesota State Board of Education defined career education as "an integral part of education. It provides purposefully planned and meaningfully taught experiences, for all persons, which contribute to self-development as it relates to various career patterns. Career education takes place at the pre-school and elementary, junior high and senior high, post-secondary and adult levels of education. Emphasis is placed on career awareness, orientation and exploration of the world of work, decision-making relative to additional education, preparation for career proficiency and/or specialized occupations, and understanding the interrelationships between a career and one's life style."[3]

The Center for Vocational and Technical Education in their glossary for staff development defines career education as "a comprehensive and organized instructional program designed to facilitate the career development of students. It is an attempt to integrate the general, academic, and vocational curricula and to bridge the gap between the school and the community. The program is characterized by "learning how to live" and "learning how to make a living."[4]

Hauck identifies six characteristics of comprehensive career education:

1. progresses from early childhood into the adult years,
2. involves all students regardless of their post-secondary plans,
3. involves the entire school program and the resources of the community,
4. unites the student, his parents, the schools, the community, and the employers in a cooperative educational venture,
5. provides the student with information representing the entire world of work, and
6. supports the student from initial career awareness, to career exploration, career direction-setting, career preparation, career placement, and provides the placement follow-through including re-education if desired.[5]

How do the preceding definitions, concepts and characteristics of career education help the elementary educator define more clearly career education? By sorting out and selecting among these concepts, some significant ones can be related to elementary career education. Among those selected concepts are:

1. Elementary career education is for all students.
2. Career education is an integral part of the elementary school program.
3. Career awareness is emphasized at the elementary level.
4. Career education assists self-development.
5. Career education recognizes that basic skills taught in the elementary school are essential to career development and life fulfillment.

Career Education — Why?

There appear to be a number of reasons for the resurgence of interest in and concern for inclusion of career education programs in our schools. An increasing dissatisfaction by students, parents and educators with educational programs is growing throughout the country. Although this dissatisfaction may actually be frustrations with the social ills in our country, for which schools may be only partly to blame, many parents and educators look to comprehensive career education programs as the change agent needed to make the necessary reforms in education.

Some critics of public school education suggest there is a large gap between the educational programs followed in the

public schools and the programs to which the public attaches great importance. Many Americans firmly believe that education is the road to success in life. "The Fourth Annual Gallup Poll of Public Attitudes Toward Education" asked respondents this question: "People have different reasons why they want their children to get an education. What are the chief reasons that come to your mind?" The responses and the percentages of respondents each were:

1.	To get better jobs	44%
2.	To get along better with people at all levels of society	43%
3.	To make more money—achieve financial success	38%
4.	To attain self-satisfaction	21%
5.	To stimulate their minds	15%
6.	Miscellaneous reasons	11%

These responses seem to indicate that the public views education largely in a pragmatic way.[6]

Educational programs have experienced many changes in organization, content and method in recent years. These changes reflect the concerns expressed by students, parents and educators to provide a comprehensive educational environment to meet the many needs of students. Despite these concerted efforts in recent years to make education more meaningful for students in our elementary and secondary schools, vocational-technical institutes, colleges and universities, a large number of young people leave formal education each year unprepared to be productive and self-fulfilling adults in our society.

Of the 3.7 million young people leaving formal education in 1970-71, it is estimated that nearly 2.5 million lacked skills adequate to enter the labor force at a level commensurate with their academic and intellectual promise. Many left with no marketable skill whatsoever.[7]

Some selected statistics for Minnesota emphasize the need for career education in Minnesota schools. It is estimated that 11,538 students dropped out of school in Minnesota during 1970. Of the high school graduates, 61% enter some post high school institute, but only 21% received college degrees. The college dropout rate in Minnesota is 51%. Of the 1970 Minnesota high school graduates, 26% entered employment after graduation. It is suggested that approximately 90% of the occupations are virtually unknown to high school graduates.[8]

Soaring education costs during the past ten years and increased demands by the public for educational accountability for the dollars expended, have directed more interest to and support

of career education. Many taxpayers and legislators are questioning the quality of the educational product in comparison with the resources expended. A large segment of the public has become weary of the increasing costs of education and have asked for a "hold the line" policy on educational expenditures. In many school districts bond elections have had a high rate of failure in recent years. The 1971 Minnesota State Legislature passed a new tax limitation that influences educational expenditures in school districts. Some of these events suggest a change in public attitude toward education, a change that is stimulating adoption of new programs and techniques for students to better meet their needs and aspirations.

It is estimated that the cost of education in our nation exceeds eighty-five billion dollars a year, which surpasses defense outlays, previously the largest expenditure. Education has become the nation's largest enterprise. Of the 3.7 million young people leaving formal education in 1970-71, nearly 2.5 million lacked skills adequate to enter the labor force at a level commensurate with their academic and intellectual promise. The estimated cost of educating these 2.5 million students was nearly twenty-eight billion dollars.[3]

The monetary loss for this group of 2.5 million students is but one consideration. The loss of self-fulfillment, self-esteem and self-confidence are other considerations to ponder that may have lasting effects on some individuals, much more significant than the dollar loss.

Elementary School

A question frequently asked by parents and educators is, "Why career education in the elementary school?" Some elementary educators suggest the elementary curriculum is crowded already and the addition of another program creates new scheduling and time problems. Many parents want their children to be children for a few years, not miniature adults. They want them to enjoy the many joys of childhood.

Others, parents and educators interpret present efforts in career education as an attempt to track children in occupational areas starting in the elementary school.

If one can accept the basic premise that skills taught in the elementary school provide an essential foundation for each individual as they start to develop for their respective career roles in society, career education is a part of the elementary school program. If exploration and development of student interests,

abilities and aptitudes are valid goals for elementary education, career education is a part of the elementary school program. If an understanding of others, their values, attitudes, and way of life is a worthy goal of elementary education, career education is a part of the elementary school program.

Career education is a continuous program for all students starting in the primary elementary grades and continuing through adulthood.

Career Education — When?

When do you start career education? The literature suggests that it should start in the early elementary grades and continue through post-secondary programs and adulthood. Traditionally, any emphasis on career education was usually reserved for the senior high school years and later years. Many proponents of career education suggest this delay until senior high school years, or no program at all, has caused many of the problems forcing young people to leave formal education with inadequate skills to enter the labor force at a level commensurate with their aptitude and potential.

Career education probably begins first in the home with individual families and continues in one way or another for years. Family discussions around the dinner table frequently center around parental occupations, successes and problems. Many children in these early years have opportunities to explore interests and develop hobbies. The television media brings the world of today into each home and young children are known to have watched hundreds of hours of television before entering school. As our population has become more mobile in recent years, young children have moved with their families to different areas of the state and nation, exposing them to new places and faces.

There appear to be four major thrusts of career education in the school setting. These four levels must be considered flexible and transition from one level to another cannot be considered to be a rigid lock-step process. Overlap between levels is necessary for some individuals considering their individual rate of development and maturity.

In the elementary school, basic skills taught provide an essential foundation for each individual as they start to develop for their respective career roles in society. Opportunities to identify and explore individual interests and abilities assist in this development. Success in elementary activities helps build self-con-

fidence and a sense of self worth and self confidence. Specific career awareness goals include: 1) to develop an awareness of the many occupational careers available in our society and their dependent and interdependent relationships, and 2) to recognize that the career role of each individual provides an important contribution to our society.

Career education in the junior high school concentrates on career exploration and experimentation. Continued development of skills in communication and computation from the elementary grades will be provided. Experiences will help students develop a positive attitude toward self through an awareness of developing talent, values, and interests as they relate to career choices and goals. Opportunities to explore the full range of career choices and the competencies required are basic to individual success in career education at this level. These experiences and opportunities will assist junior high school students in acquiring the necessary background and information for future planning to meet individual career goals.

A major goal of senior high school career education programs is to assist students in attaining the competencies necessary for entry into an occupation and or for specialized education at the post-secondary level. This involves exploring occupational opportunities in one or several careers and the entry level competencies required. This exploration will enable students to make different career choices - a life style based on individual interests, abilities, needs and values. It is essential at this level for students to explore in more depth the relationship between all education and individual career goals. In addition to providing the necessary foundation for specialized education at the post-secondary level, many students have the opportunity for participation in on-the-job training and work-study programs.

Post-secondary and continuing education career education programs assist students and adults in preparing for entry level and or advanced level employment. This includes opportunities for job upgrading, career advancement or preparation for new or different opportunities appropriate for individual abilities and interests.

When does career education take place? Career education is a part of one's total development, starting in the home continuing through the elementary, junior high school, senior high school and post-secondary adult levels. Career education is not a single course or educational experience, but rather a continuous sequence of career education experiences designed to provide awareness, exploration, decision-making career information, an-

try-level skills and specialized education necessary to fulfill a career choice based on individual interests, abilities, needs and values.

Career Education — Where?

Career education takes place in the home, school and community. Career education programs assist in bringing together the students, parents, schools, community, and employers in a joint educational effort.

The home environment and family influence begin to shape individual attitudes toward the self, others and their way of life. The home is a consumer of the products of the economy and the services of the community. Parental career roles and family experiences influence the development of basic attitudes toward the world of work.

Although the classroom is the most obvious delivery system for career education, other techniques are appropriate for merging school-community career education efforts. Field trips to business, industry, and other community agencies are common in many career education programs. On-the-job training programs and work-study programs are also representative of school-community cooperation. In many programs parents are used as resource persons to contribute to career education awareness activities.

CHAPTER TWO

GOALS OF ELEMENTARY EDUCATION

Literature in the field of career education frequently fails to emphasize adequately the importance of the basic goals of elementary education and their relationships with career education awareness concepts.

Elementary educators have many responsibilities to the children who come through the school doors each day. Some of the most important would seem to be providing young children with the basic skills, understandings and attitudes necessary to communicate, function and adapt in a fast changing society. Many jobs that will be available to our present day elementary students when they complete secondary school do not presently exist. It does seem that the elementary school can do much to help prepare these children for the future by helping them master the basic skills to the best of their ability, develop problem-solving skills, recognize their own importance as individuals, and promote a positive attitude toward others and their way of life.

Basic Skills—Historically, the elementary school has had the major responsibility for teaching the basic skills to students. It has been expected that elementary students would develop, to the extent of their individual capacities, mastery of the basic skills required in obtaining and expressing ideas through the effective use of words, numbers and other symbols. Skills in the logical processes of search, analysis, evaluation and problem-solving, in critical thinking, and in the use of symbolism have also been emphasized in the elementary programs.

The elementary school's responsibility for basic skills has not diminished over the years. "The Fourth Annual Gallup Poll of Public Attitudes Toward Education" asked respondents to rank three of nine identified specific programs for reaching educational goals. The question asked was, "Which three of these educational programs would you like your local elementary schools to give more attention to?" Below are ratings of these programs based upon the number of mentions.

1. Teaching students the skills of reading, writing and arithmetic.
2. Teaching students how to solve problems and think for themselves.

3. Teaching students to respect law and authority.
4. Teaching students how to get along with others.
5. Teaching students the skills of speaking and listening.
6. Teaching students vocational skills.
7. Teaching students health and physical education.
8. Teaching students about the world of today and yesterday (that is history, geography, and civics).
9. Teaching students how to compete with others.[10]

Although this is but one indicator of public opinon, the first five programs identified represent a major segment of current elementary school programs.

The present rate of change in our society suggests that when today's elementary students graduate or leave secondary school, they will be employed in many occupations that do not now exist. Therefore, it seems appropriate for the elementary school to continue emphasizing instruction in the basic skills areas. Young adults will still find it necessary to communicate with others in our society. Basic computation skills will still be necessary and be used in day-to-day living. Problem-solving skills will assist young adults in meeting new challenges and problems, technological and social, in which they will be immersed in our changing environment.

Basic skills taught in the elementary school provide an essential foundation for each individual as they start to develop for their respective career roles in society.

Affective Domain—Although mastery of basic skills remains a primary goal of elementary education, student development in the affective domain, that of attitudes, values and appreciations is also a major goal to be dealt with in the elementary school program.

Individuals differ in their interests, aptitudes, abilities, values and attitudes. The understanding, acceptance and development of self and the recognition of relationships with others, dependent and interdependent, is a lifelong process that is constantly changing and influenced by experience. Many of these important experiences begin in the home with the child's family and are further developed during the elementary school years. Other opportunities for developing a sense of self-worth, self-realization and self-confidence are provided for in the elementary school and further developed in the secondary school years. As students gain a better understanding of their own interests and abilities, they will see more clearly that the career role of each individual provides an important contribution to our society.

CHAPTER THREE

THE ELEMENTARY SCHOOL PROGRAM AND CAREER AWARENESS DEVELOPMENT

All areas of the elementary school curriculum provide opportunities for career awareness development. Many career awareness concepts identified in the current literature have been included in elementary instructional activities for a number of years. One of the identity problems has been that many of these career awareness concepts have been integrated so well within the instructional program that they have not been visible to the casual observer. These career awareness activities have been more comprehensive than simply identifying large numbers of occupations within the world of work.

For many years many elementary schools have taken students on field trips to businesses, industry, farms, parks, city and state governments, music events, athletic contests and numerous other places as part of planned learning experiences to enrich and supplement their elementary studies.

Many elementary schools have invited into the school and classroom, community resources persons, including parents, to enrich and supplement a unit being studied by a class or instructional group. This has varied from the frequently called upon policeman and fireman to the airline pilot, carpenter, plumber, computer analyst and others too numerous to identify here.

Extensive use of the many fine audio-visual materials, aids and equipment that we have available today, brings far away people and their way of life right into the classroom.

Some selected career awareness activities organized and developed by elementary educators, illustrate the use of role playing, demonstrations, group activities, individual activities, and dramatization in the elementary school program.

Social Studies. An examination of most current elementary social studies programs will identify many study units that involve students and make them aware of the world of work. Most current social studies programs follow the modified expanding horizons approach, beginning with the child and progressing to the family, neighborhood, community, state, nation and world. These study units provide numerous opportunities for student

exposure to how others live, whether it be within the neighborhood, community, state, nation, or another country, and their dependent and interdependent relationships. Development of the self is provided by emphasis on value development, inquiry strategies, and high-level thinking skills. Selected examples of social studies lessons with integrated career awareness concepts:

A. Primary Grades—

1. Home, Family, Community Unit (Art related).

   Objectives: To provide children with the opportunity to relate what types of jobs they do at home, and why

   Learning Activity: This activity can be correlated with an art lesson by having children draw pictures of themselves doing a job at home. Pictures can be shared with the class, explaining what they are doing. Discussion can be centered around the work roles of children, emphasizing the importance of working even at an early age.

2. Home—Family Unit (Language Arts related)

   Objectives: To provide children with the opportunity of sharing something "uniquely their own," their parent. To provide children with the opportunity to hear and see what people do during the work day. To provide children with the opportunity to see and touch the tools of work used by their parents. To provide children with the opportunity to write a letter of invitation to their parents.

   Learning Activity: Schedule parental visits (mothers and fathers) to the classroom to explain their jobs. Allow children to write the invitations and give them the opportunity to introduce their parents to the class. After the visits, thank you letters can be sent to participating parents.

3. Community Unit (Language Arts and Art related)

   Objectives: To make the class aware of the different jobs in the community. To have each child find or illustrate a picture of each worker they've found in the community.

   Learning Activity: Start a classroom list or scrapbook called "Jobs We Know." Have the children list all the jobs in a community they know and the related tasks of these jobs. This list can be added to whenever a new job is discussed in the classroom. The identified jobs

can either be illustrated by children or collected pictures from magazines and newspapers.

4. Community Unit (Science related)

   Objectives: To make children aware that environment does affect the work and life of the people in the community

   Learning Activity: Have the children discuss as a group, the climate and environment of each of the communities they have studied. List each community separately as to temperature, rainfall, vegetation, farmland, and animal life. Divide the class into three groups. Let each group represent one of the communities studied. Each group is to work together using the list of climate and environment facts to tell the jobs and work of each community and how the climate affects the work and life of the people.

B. Intermediate Grades—

1. Industry Unit

   Objective: To give children the opportunity to experience the organization and operation of a business.

   Learning Activity: A reading and discussion of "How a Business Gets Started" precedes this activity. Basic steps involved in setting up a corporation are identified and the class cooperatively completes the basic steps from selecting a product and naming the corporation to selling stock, advertising sales, assembly line, job application and selection, etc., through all identified steps. Follow-up discussion after the activity is completed can center on job satisfaction, efficiency, expenses, problems and necessary modifications.

2. Governement Unit

   Objective: To develop an awareness of our state government and the occupations connected with it.

   Learning Activity: Briefly discuss responsibilities and privileges of Minnesota citizens. Discuss responsibilities and privileges parents and children have. Conclude by stressing that responsibilities and privileges Minnesotans have are partially due to effective state government.

   Enrichment Activities

   a. Write to officials of the state government to find out additional information about government jobs.

b. If possible, visit the capitol and state legislature and observe government in operation.

c. Invite to school local community government officials to explain their jobs and responsibilities.

d. Research and report on government agencies employed by the community.

e. Investigate funding sources to finance local, state and federal government.

3. Family, Home, Community Unit

Objective: To help the student view self as a worthy person. To help the student appreciate his own potentials and interests.

Learning Activity: This activity follows previous lessons concentrating on roles of the individual in the family, including family interactions. In this activity the student will explore the make-up of a community through occupational possibilities. The discussion can be initiated by asking, "What occupation would you like to have in your community? How is your occupational choice dependent upon your admiration for a person already in that occupation?" Have students develop a role-playing scene in which each one's occupation is portrayed. Upon completion of this activity, have the students read about their occupations and determine if their perception is consistent with reality. Discuss with the students how this activity applied to the world of work.

4. Community, State Unit

Objectives: To further develop an awareness of the importance of each individual to society. To identify a variety of ways individual students contribute to society.

Learning Activity: Students may work individually or in small groups to conduct a survey of local organizations in the community (Chamber of Commerce, P.T.A., Boy Scouts, Girl Scouts, Red Cross, Lions, Kiwanis, etc.) and describe their activities and contributions to the community.

Suggested discussion questions:

1. Are the contributions valuable to the community? Why or why not?

2. Why do individuals participate in these organizations?
3. What satisfaction do individuals get from participating in the various organizations?

Students may also discuss how they can contribute to school and community affairs. Small groups and/or individuals can present their ideas to the class for open discussion.

Enrichment Activities:

a. Individual or small groups can attend selected organization meetings to determine organization goals for the community. Report findings back to the class. An alternate is to invite selected organization representatives to the classroom and review organization goals and activities.

b. Identify a community need and explore ways to satisfy this need. Community organizations can be contacted concerning their interest in working on this need.

5. Industry Units

Objectives: To understand how improved tools, processes, and techniques affected economic growth. To understand that division of labor affected economic conditions. To understand how business organizations emerge. To understand how the Industrial Revolution affected the family unit.

Learning Activity: Discuss the inventions in England which transformed the last half of the eighteenth century in England into an industrial economy. Have individuals and/or small groups develop charts in one or more areas showing processes, methods and machines used in: a) cloth manufacturing, b) iron and steel production, or c) other appropriate goods. Develop a miniature assembly line for some class project.

Visit an assembly line in the community if possible. Discuss the effects of having more than one member of the famliy as a wage earner.[11]

Opportunities for exposure of elementary students to an orientation and awareness to the world of work are not limited to the social studies area exclusively, although it is a natural for many of these awareness concepts. Experiences and activities in science, mathematics, communication skills, music, art,

physical education, environmental education and health also contribute to elementary career awareness development and self-development.

Examination of the sample lessons previously identified point out clearly the need and opportunity for integration of multiple subject areas of the elementary curriculum. Social studies lessons require use of multiple communication skills of reading, writing, speaking and listening, as do other subject areas.

The following selected sample lessons in subject areas other than social studies reinforce the point made earlier that all elementary subject areas present opportunities for career awareness development and self-development.

Communication Skills

A. Primary Grades —

1. Communication Unit (Speaking and Listening)

   Objectives: To assist children in answering and speaking clearly on the telephone. To assist children in the effective use of the telephone as a communication tool.

   Learning Activity: Request loan telephone kits from the telephone company to use in accomplishing the identified objectives. Provide opportunities for all children to participate in speaking on the telephone emphasizing the importance of speaking clearly, listening carefully, and practicing common courtesies in using the telephone. An additional enrichment activity could be requesting a resource person from the telephone company to come to the classroom assisting with the activity and also sharing with the class the many different types of workers necessary in the telephone company.

2. Communication Unit (Art related)

   Objectives: To encourage children to look at themselves and their actions on a daily basis for a period of time. To provide the opportunity for children to record their daily feelings and experiences, and make appropriate illustrations to be included in a booklet to be shared with friends and parents.

   Learning Activity: Have the children keep a diary of their feelings and experiences for a short period of time, possibly a week. Have them write their entries in story style complete with illustrations where appropriate. This booklet can be shared with classmates and parents.

3. Communication Unit (Dramatization)

Objectives: To give children the opportunity to role play the work their parents do. To give children the opportunity to communicate an idea to their classmates without speaking.

Learning Activity: Have children review or find out what what occupation their parents are involved in. Over a period of time allow each child the opportunity to pantomime their parent's occupation and allow the remainder of the class to guess what it is.

B. Intermediate Grades —

1. Communications Unit (Creative writing)

Objectives: To assist children in developing a basic understanding of themselves as individuals and how they relate to others by understanding individual likes, dislikes, abilities and interests.

Learning Activity: Let children choose creative writing topics from the following suggestions and/or individual choices.

a. My dreams . . . .
b. Is school important?
c. Happy thoughts . . . .
d. Gloomy thoughts . . . .
e. Things I like about my friends.
f. Other children choices

2. Communication skills (Other related subjects)

Objectives: To assist children to be aware that individual hobbies and interests today could lead to a career in the future.

Learning Activity: Children can bring hobbies to school over a period of time and share and explain their hobbies to classmates. Individual and/or small groups can research selected hobbies to find out the different careers that could be developed out of those hobbies. A class bulletin board could be constructed to highlight selected hobbies and related careers.

3. Communication Skills (Other related subjects)

Objectives: To develop an understanding of the relationship between work and leisure pursuits.

Learning Activity: Through class discussion, define work

time and leisure time listing a variety of activities related to both. Review the necessity to plan time carefully so one has time for both work and leisure. Identify how this planning is important for children (i.e., school work, household jobs, paper routes, etc.) as well as adults. Discuss how one activity is an occupation for one individual and a leisure time activity for someone else.

Creative Arts. Many music and art activities correlate well with other content areas such as social studies and communication skills activities identified earlier. Frequently students will have special interests and abilities in these areas and can explore their special interests and abilities in more depth on an individual basis. Indentification of the numerous occupations related to this area provide an enrichment activity for consideration. This area presents an excellent opportunity to point out to students that what some people do for an occupation, other participate in as a leisure activity.

Science. Science units concentrating on topics such as weather, machines, ecology, space and electricity provide ample opportunity for students to increase their awareness of other careers and how they affect their daily activities. Current science programs emphasize inquiry skills, problem solving activities and "hands-on" activities. The opportunities for multiple correlation with other subject areas are tremendous. Take, for example, a science unit on electricity. This unit can be correlated with social studies units on the family, school and community. Communication skills are used without realizing the involvement. Health and safety considerations become an integral part of this unit. Related ecology units become involved in the use and misuse of electricity considering automation and technology, population growth and pollution.

Mathematics. Elementary math units and activities also provide many opportunities for correlation with other subject areas. A study of our monetary system opens up discussion and study on: a) a brief history of monetary systems, b) the need for a medium of exchange, c) retailer-consumer roles, d) banks and savings and loan institutions, e) coin collecting as a hobby or career, and e) occupations related to minting coins and printing bills. A comprehensive money unit is much more than just having children learn to differentiate between coins and make change for a fictitious purchase, although this may be a specific instructional objective. Basic computation skills are still necessary for student success in this unit and other related units and activities,

in school and out. Similar examples could be identified for measurement and time units. Numerous schools have established school stores to provide children with an opportunity to practice some of the basic skills learned.

In summary, the selected sample lessons and activities identified point out the multiple correlation opportunities in the elementary curriculum. This also emphasizes a point made earlier that career education awareness is not a single activity nor experience that happens. Rather, it is continuous sequence of well-planned experiences that assist total student development.

CHAPTER FOUR

ELEMENTARY CAREER EDUCATION AWARENESS NEEDS

A number of selected elementary career awareness activities have been identified in Chapter Three. Although these activities indicate how career awareness can be integrated in the elementary curriculum, there is opportunity for modifying present techniques and developing new approaches to provide more meaningful career awareness programs. To accomplish this task, a number of identified needs have to be considered for elementary educators.

Time. Time is a valuable resource for everyone. Time is needed for elementary educators to meet together to think, plan, develop and correlate new approaches to career awareness, as well as to modify present techniques in the curriculum. If the classroom setting is one of the prime delivery systems for elementary career awareness, and the classroom teacher has major responsibility for directing the awareness activities, then elementary teachers must have the opportunity to plan and organize adequately for this responsibility. It is difficult to be creative at four o'clock in the afternoon. Large blocks of time are necessary for teachers to really get into the task. Some school districts schedule half-days or full-days periodically for teacher in-service activities.Other school districts provide for summer writing teams with grade level representation to develop career awareness concepts, ideas and sample lessons for district utilization.

Although other methods and techniques for teacher in-service have value, such as: a) demonstration programs, b) program visitations, c) specially designed college/university seminars, workshops and extension classes, d) printed bulletins and monographs, e) regional teacher's meetings, and f) audio-visual materials; the classroom teachers still require time to sort and select from all the literature and ideas to adopt a career awareness program that meets the school district and community needs.

The classroom teacher must be actively involved in the process of reviewing, selecting, modifying and developing career awareness activities and experiences for the elementary program. Planning and development time is necessary to integrate these career awareness activities in the elementary curriculum.

Community Resources Guides. It would seem appropriate for every school to have a comprehensive community resource guide listing every person, place or thing that has potential for enriching and supplementing the curriculum within the school community. This necessitates a comprehensive community survey with contacts with parents, other community citizens, businesses, industries, agencies and other possible resource contacts in the community. Many school districts combine a mail survey questionnaire with appropriate person-to-person contacts to collect the data for the resource guide. Questionnaires usually ask for the following information: a) basic identification data (name, telphone number, and address), b) area of contribution (occupation, industry, business, hobby, interest, etc.), c) special skills available, d) amount of time available, and when, e) size of group desirable for contribution.The yellow pages in the telephone directory provide valuable assistance in organizing the community survey. Retired persons and senior citizens should not be overlooked in developing this resource file. They have many valuable experiences to offer in most career areas. Service agencies and clubs should not be overlooked in the survey.

The second step is to index this community resource guide with the different subject areas and specific learning units within each subject area. This identification, coordination and articulation is extremely important for optimum use of this guide. It will prevent unnecessary duplication of resource persons in the classroom and extended school activities in the community.

Audio-Visval Materials. More comprehensive use of audio-visual materials, techniques and aids is necessary in many school districts. Most elementary schools appear to have enough "hardware," but need more appropriate materials to use with the hardware. Better distribution, coordination and articulation of audio-visual materials is necessary in schools and within school districts and regions. Regional A-V centers can alleviate some of the problems involved here, particularly for the small school district, and provide service in an economical manner. Every district cannot realistically afford a comprehensive 16mm film library. Film rental efforts frequently get bogged down with scheduling problems. However, combined school district efforts seem to hold considerable promise in improving this area. A comprehensive directory of such materials has also been developed and distributed to Minnesota schools.[13]

Field Trips. There seems to be a need in many elementary schools to expand field trip activities. Field trips to selected sites outside the school can make valuable contributions to achieving

career awareness goals in the elementary program. Meaningful field trips result from pre-planning, pre-visitation and appropriate follow-up activities back in the classroom.

Field trips usually cost money and this must be budgeted in each school district to provide for this valuable extension of classroom and school educational activities. It doesn't seem equitable to assess students for costs of field trips that are valuable learning experiences, an extension of classroom activities.

We can no longer assume that all appropriate and necessary educational activities for students will take place within the four walls of the classroom, or two covers of a book. We must get geared up for this extension of supplementary educational activities into the community and surrounding region.

Support. There are many types of support necessary for successful implementation of career awareness objectives in the elementary curriculum. Support for time and dollars has been alluded to previously, pointing out the need for teacher time for planning and development, as well as financial support for expanded audio-visual programs and educational experiences outside the school.

Endorsement and support of career awareness programs from the local school district board of education and school administration is necessary for successful implementation. Central office support and leadership will assist in the planning, development, implementation and evaluation of career awareness programs.

Active involvement of the community will help citizens, business, industry and community agencies understand more completely the objectives of elementary career awareness programs and how they can contribute to the successful completion of these objectives. This interaction and involvement by the community will assist development of the community resource guide.

The State Department of Education has responsibilities for support and leadership in the development of elementary career awareness programs. Some of these leadership responsibilities include: a) advocating and generating interest in career education, b) collecting career education information and disseminating it throughout the state, c) coordination career education activities, d) curriculum development (Chapter Six identifies exemplary career education projects in Minnesota) and, e) evaluation procedures, instruments and techniques for career education programs. Successful completion of these responsibilities will facilitate the inplementation of career education

programs in the schools which hopefully will assist children and youth in the development of their full potentials.

REFERENCES

1. California State Department of Education, Bureau of Pupil Personnel Services. *Career Guidance.* (Sacramento, 1971), p. 38.
2. U. S. Superintendent of Documents. *Career Education: A Handbook for Implementation.* (Washington: Government Printing Office, 1972), pp. 7-8.
3. Position Paper on Career Education. Adopted by the Minnesota State Board of Education on May 2, 1972.
4. Center for Vocational and Technical Education. *A Comprehensive Career Education Model: Glossary for Staff Development,* (Columbus: The Ohio State University, 1972). p. 6.
5. Edward F. Hauck. *Designing Comprehensive Programs of Career Education for the Elementary School.* Center for Vocational and technical Education. (Columbus: The Ohio State University, 1972).
6. George H. Gallup, "Fourth Annual Gallup Poll of Public Attitudes Toward Education", *Phi Delta Kappan,* September, 1972, p. 35.
7. Speech given by Duane J. Mattheis, Deputy Commissioner for School Systems, Department of Health, Education and Welfare, at the Minnesota School Counselor's Association Meeting, Brainerd, Minnesota, May 7, 1972.
8. Minnesota State Department of Education, Vocational-Technical Education Division, *Career Development.* (St. Paul, 1972).
9. Matheis, *op. cit.*
10. Gallup, *op. cit.*, p. 36.
11. Owatonna Public Schools. *Career Awareness.* (Owatonna, 1972). Distributed by Pupil Personnel Services, Minnesota Department of Education, St. Paul.
12. *Ibid.*
13. Truly T. Lathaw *Audio-Visual Guidance Materials: An Annotated Bibliography and Directory of Minnesota Services.* Minnesota Department of Education, Pupil Personnel Services, St. Paul, 1970.

CHAPTER FIVE

CAREER AWARENESS AND ELEMENTARY SCHOOL GUIDANCE IN PERSPECTIVE

G. Dean Miller*

Elementary School Guidance

Ginzberg (1971) in his comprehensive review of the results of various kinds of *career* guidance argued that ". . . guidance counselors primarily concerned with career development have little to contribute to the elementary school" (p. 278). His orientation to guidance (vocational guidance) is a narrow concept for he did not really consider any of the other theoretical approaches to elementary school guidance such as the developmental model. In fact, the developmental model was just beginning to be implemented in the schools at the time Ginzberg and his associates reviewed the literature. Research on developmental guidance activities was just beginning to be reported in the literature. However, elementary school guidance theorists and practitioners would probably agree with Ginzberg on the one point that guidance counselors in the elementary school *primarily* focusing on career development cannot be justified.

In reviewing the viewpoints of guidance theorists most of which were published during the late sixties and early seventies, little or no reference to career development was made as they conceptualized elementary school guidance and the role of the counselor (Faust, 1968; Van Hoose, 1968; Dinkmeyer & Caldwell, 1970; Grams, 1966; Gum, 1969; Miller, 1966; Smith & Eckerson, 1963). Some early writers made a little more of career development in their conceptualization of elementary guidance (Hill and Luckey, 1969; Meeks, 1968; Munson, 1970). It is interesting that Hoyt (1967), a prominent figure in the vocational guidance movement, writing on guidance and the role of the counselor in the elementary school in one of the early issues of the *Elementary School Guidance and Counseling* journal made no reference to career development, career awareness, or vocational guidance. As the senior author of a later publication on career education and the elementary school teacher Hoyt makes no references to an elementary school

*G. Dean Miller is a Consultant, Pupil Personnel Services, Division of Instruction, Minnesota Department of Education.

counselor even though other resource individuals are mentioned (Hoyt, Pinson, Laramore, and Mangum, 1973).

Many writers on elementary school guidance place primary emphasis on facilitating the development of the child as a learner with the counselor as a consultant to teachers and parents who spend a large proportion of time in direct contact with children. (See review in Miller, Gum & Bender, 1972, pp. 7-14.). It is appropriate to examine the writings of a few of the writers to catch the flavor of the developmental approach.

Dinkmeyer (1962) placed considerable emphasis on the consultative role of the elementary school counselor as did Faust (1965). The overriding purpose of the elementary guidance program, according to Dinkmeyer, is to maximize the development of each child. The developmental concept of elementary guidance during this period is typified by Smith and Eckerson (1963):

> Guidance in elementary schools is usually interpreted as a service to all children in making maximum use of their abilities, for their own good and for that of society. The emphases of this service are early identification of the pupils' intellectual, emotional, social, and physical characteristics; development of his talent; diagnosis of his learning difficulties, if any; and early use of available resources to meet his needs (p. 27).

Cottingham (1966) was aware that there were many similarities in points of view about elementary guidance, especially concern about the total development of all children. However, he called for a national study of elementary school guidance to examine more critically the assumptions underlying elementary school guidance and carefully plan implementation. It was for some of these same reasons that the Minnesota Department of Education sponsored writing projects to develop a sound approach to elementary school guidance.

Grams (1966) author of the first Minnesota monograph on elementary guidance, stresesd a learner-centered theory. The purpose of guidance is stated as follows:

> . . . to develop competence, a sufficiency for living, by utilizing the process of education as means to this end. The development of this process is facilitated by guidance; the skills, abilities, appreciations, knowledges, attitudes, etc., are seen as the raw materials which the individual may utilize in the course of an interdependent contributive self-actualizing life in society (p. 14).

Roles of various functionaries including the elementary counselor are spelled out in addition to the primary importance of parents and teachers. In a sequel monograph, Gum (1969), author of another Minnesota elementary school guidance publication, emphasized the affective learning domain as well as the cognitive and identified the role of the guidance counselor in working with pupils, parents, teachers, and other specialists.

Faust (1968) in an attempt to expand the counselor's role beyond counseling stressed work with all pupils through consultation with teachers, curriculum staff, administrators, parents, other specialists and community agencies. Stress was placed upon developmental consultation with teachers since it is through their classroom role children are freed to learn. "It is indeed difficult to understand that, until society provides an emphasis that attends to all children, and on a development basis, each generation of that society will continue to produce great numbers of crippled, neglected learners" (p. 36).

Van Hoose (1968) stressed the counseling role of counselors with all children in their cognitive, emotional and vocational development although the consultative role with teachers and parents was included. These roles are based upon the child's need for direction, self-realization, prevention of maladjustment and remedial assistance with normal problems of growth and development.

Dinkmeyer and Caldwell (1970) argued that developmental guidance is necessary because the formative years of childhood demands it. Teachers alone are unable to meet all of the pupil needs, such as values, attitudes and goals. They described guidance as the

> organized effort of the school to personalize and humanize the educational process for all students. The process involves a cooperative effort on the part of all school personnel to assist the child to understand himself and others, his opportunities, and his responsibilities, to the end that he might become purposeful in his approach to the educational experience and life (p. 3).

The suggested model for Minnesota schools to consider contained both remedial and developmental components; however, the main thrust was that of facilitating growth and development.

> . . . Emphasis here is upon facilitating the learning and self-actualization of all children rather than focusing upon problem solving or remedial measures for the few (Miller, 1966, p. 215).

The elementary counselor is not "crisis oriented" Gum (1969). He stressed some specific elementary school counselor responsibilities.

> A major emphasis will be to assist parents and teachers to more effectively facilitate cognitive and affective development . . . Developmental facilitation implies that the elementary guidance counselor will be primarily responsible for coordinating and facilitating the development of and all times leading the discussion of regularly scheduled sessions with groups of children on such topics as peer relations, physical growth, sex education, teacher-pupil relations, the meaning and purpose of pupil evaluation, mental health aspects, dealing with adults, problems in learning, attitudes toward self and others, and learning attitudes . . . consultation is to be carried on with parents and teachers, either individually or in groups (Gum, 1969, pp. 29-31).

The theoretical demonstration model suggested functions the counselor-consultant might perform in implementing a developmentally oriented role. Of the sixteen functions suggested, twelve are concerned with working with teachers, parents and the principal. The emphasis is clearly upon consulting with significant adults and working developmentally with all pupils. The following examples are illustrative of suggested counselor functions.

> Assist parents and teachers in developing further understanding that before desirable learning and personal adequacy can be fostered, proper nutrition, sanitation, disease prevention, medical care, safety, belongingness and love and esteem needs of the individual must be served.
>
> Assist teachers to operate from a facilitative, what-can-we-do attitude to stimulate human development with all individuals.
>
> Cooperate with the principal in identifying and establishing the "ideal" climate of the school — the constant search for ways of expressing the "I care" attitude toward each child in the group — getting to know the students rather than just knowing about them (Miller, 1966, pp. 215-216).

The Minnesota Department of Education through the use of Federal funds made available under the National Defense Education Act (NDEA) and Titles I and III of the Elementary and Secondary Education Act of 1965 encouraged local schools to implement the role of the elementary school counselor. The

fourteen positions were evaluated over a two-year period relative to the nature of the role implemented and the differential effectiveness of counselors across sixteen pupil-teacher-parent hoped for guidance outcome variables (Miller, Gum & Bender, 1972).

More recently (Miller, 1973) the Minnesota Department of Education sponsored a dozen, most of them controlled, studies in which counselor effectiveness was shown with a variety of such important guidance outcome variables as self-concept, peer acceptance, attitude toward school, and interpersonal communication skills of teachers and parents. Some results of these two major evaluation efforts will be mentioned later.

Career Education

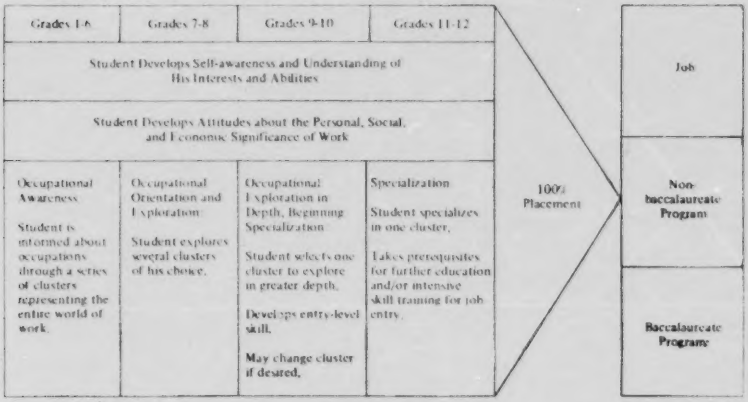
The Office of Education under former Commissioner Sidney P. Marland, Jr., is largely responsible for the stimulation given to the movement of career education and while the Office tended to avoid suggesting any definition he wrote the following in the *American Education* (1971):

> . . . what the term "career education" means to me is basically a point of view, a concept — a concept that says three things: First, that career education will be part of the curriculum for all students, not just some. Second, that it will continue throughout a youngster's stay in school, from the first grade through senior high and beyond, if he so elects. And third, that every student leaving school will possess the skills necessary to give him a start to making a livelihood for himself and his family, even if he leaves before completing high school (p. 25).

In spite of intentions by the Office of Education not to specify the particulars Hardwick (1971) did present a USOE suggested model for career education in which the following areas were stressed: 1) an occupational-cluster curriculum effort, 2) a curriculum refocusing effort for grades 1-8, and 3) a subject matter relating effort in grades 9-12. The following schema (Figure 1) shows the proposed USEO model.

Figure 1

Suggested Career Education Experiences by Grade Level (USOE Model)


Grades 1-6
Grades 7-8
Grades 9-10
Grades 11-12
Student Develops Self-awareness and Understanding of His Interests and Abilities
Student Develops Attitudes about the Personal, Social, and Economic Significance of Work
Occupational Awareness
Student is informed about occupations through a series of clusters representing the entire world of work.
Occupational Orientation and Exploration
Student explores several clusters of his choice.
Occupational Exploration in Depth, Beginning Specialization
Student selects one cluster to explore in greater depth.
Develops entry-level skill.
May change cluster if desired.
Specialization
Student specializes in one cluster.
Takes prerequisites for further education and/or intensive skill training for job entry.
100% Placement
Job
Non-baccalaureate Program
Baccalaureate Program

To implement the proposed model additional counselors and paraprofessionals would be needed according to U.S. Office of Education staff. In-service education for regular staff to provide training in the use of new instructional material and media was also recommended.

Gysbers (1973) points out the U.S. Office of Education in its various publications and project guidelines on career education tends to stress economic man as the primary focus of career education while others define the term broadly — indeed total man. Those who embrace more comprehensive view are concerned that the work oriented view is insufficient to cover all that the individual needs for full development.

An example of the work-oriented view is in a career education handbook sponsored by the U.S. Office of Education (1972) :

> Career education is the total effort of public education and the community aimed at helping all individuals to become familiar with the values of a work-oriented society, to integrate these values into their personal value systems, and to implement these values in their lives in such a way that work becomes possible, meaningful, and satisfying to each individual (p. 8).

Another important issue discussed by Gysbers is whether career education is *all* or only *part* of education. He points out that "the potential that the concept has for vitalizing and re-

focusing education could be lost if these basic differences are not resolved." He concludes:

> Although career development is defined in several ways — sometimes as a component of career education and sometimes as that part of human development dealing with the work world — it is seen as having primarily an occupational focus. If it is defined in this manner, such a view is too narrow. What is neded is a way of describing human growth and development in which "all dimensions of life are focused upon, not as separate entities, but as interrelated parts of the whole person."

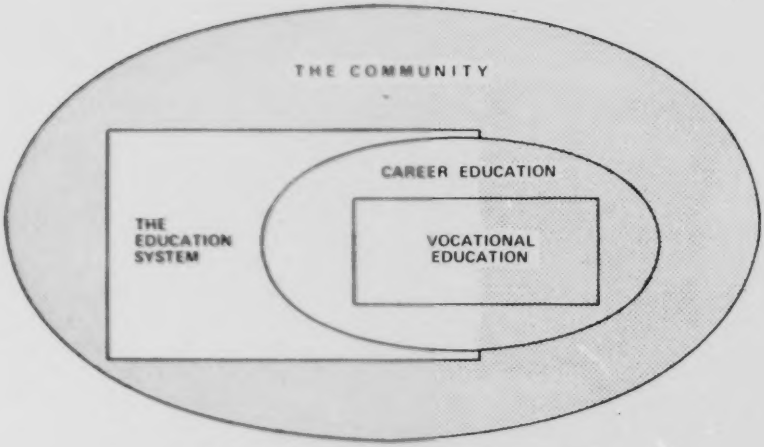
Such a broad emphasis really makes career education synonymous with education much as that articulated by McMurrin (1973). Gysbers and Moore (1972) used the term "life career development" to account for the more comprehensive view. Certainly if such a broad definition were used the whole purpose of the school would be subsumed under it.

Hoyt et al. (1973) characterize career education a little differently.

> if the definition of liberal education is those formal learning experiences which help the individual understand the society in which he lives and himself in relation to it, re-examine the values of that society, and either reconfirm or modify his commitments to them and gain the skills to function successfully within that society, career education must be part (but not the whole) of liberation education.
>
> Vocational education is only part of career education and career education only one of the assignments of the education system (p. 27).

To show how these components relate to each other Hoyt and his associates suggest the schema on the next page (Figure 2). This conceptualization appears to place career education and related components into proper perspective.

Figure 2



Career Education's Place in Education

Borow (1966) examined career development, theory and research and attempted to relate it to child development. Most of the research to date has been on adolescents since they are going through a developmental stage which contains more vocationally pronounced aspects than earlier stages. One example of relating vocational development to developmental psychology is that by Havighurst (1964) who followed Erickson's (1950) stages of psychosocial tasks and paralleled them to Super's (1957) vocational developmental tasks. The ages and primary developmental activities which parallel the first four stages of vocational development in Havighurst's theory follows (Table 1) in an abridged form by Borow (1964):

Table 1

Age	Stage of Vocational Development	Representative Vocational Developmental Task
5-10	Identification with a worker	Concept of working becomes an essential part of the ego ideal.
10-15	Acquiring the basic habits of industry	Learning to organize one's time and energy to get chores and school work done.
15-25	Acquiring identity as a worker	Choosing and preparing for an occupation.
25-40	Becoming a productive person	Mastering the skills of one's occupation.

Much of what current career education writers have to say is that the career component of one's life is to bring relevancy to

education and provide a medium through which one is able to implement the self. Havighurst (1964) estimated only a small part of the various occupational groups in our labor force are in jobs which are ego-involving versus those which provide little personal involvement (society maintaining). This will be discussed later.

Two major national associations, the National Vocational Guidance Association (NVGA) and the American Vocation Association (AVA); recently (1973) published a joint position paper on career development and career guidance. This view of career guidance recognizes that career development is part of human development:

1. Development occurs during the lifetime of an individual. It can be described in maturational terms denoting progression through life stages and the mastery of developmental tasks at each stage. Although research evidence is lacking, it seems unlikely that intervention can substantially shorten this maturational process.
2. Individual development is influenced by both heredity and environment. Psychological, sociological, educational, political, economic, and physical factors affect development. Appropriate intervention strategies which focus upon these factors can influence the quality of individual development.
3. Development is a continuous process. Individual development can best be facilitated by intervention strategies that begin in the early years and continue throughout the life of the person. Programs which focus only at certain points or at certain stages in the individual's life will have limited effectiveness.
4. Although development is continuous, certain aspects are dominant at various periods in the life span. Programs designed to facilitate career development should account for the dominant aspects at given stages.
5. Individual development involves a progressive differentiation and integration of the person's self and his perceived world. Intervention strategies need to be designed to assist individuals during normal maturational stages of career development rather than to provide remedial assistance to individuals whose development has been damaged or retarded.
6. While common developmental stages can be observed and described during childhood and adult life, individual differences in progressing through these stages can be expected. Intervention programs should provide for these differences, making no assumption that some-

thing is "wrong" with those who progress at atypical rates.

7. Excessive deprivation with respect to any single aspect of human development can retard optimal development in other areas. Optimal human development programs are comprehensive in nature, not limited to any single facet. It is recognized that those who suffer from deprivation may require special and intensive assistance. Where deprivation is long term, short term intervention is not likely to be sufficient.

It should be pointed out, however, that career as defined in the NVGA-AVA statement is not equated by the authors with occupations nor viewed as an overall general life pattern but somewhere in between. Career is defined as "a time extended working out of a purposeful life pattern through *work* undertaken by the individual." "Work . . . may be defined as an expenditure of effort designed to effect some change, however slight, in some province of civilization." It implies that it is the intention of work activity to improve one's own condition or that of society. These broad definitions of "career" and "work" seem to contradict the earlier statement that the view espoused by the authors is somewhere between career or occupation and career as one's general life pattern. The definitions are quite broad. There also appears to be an obvious omission of the maintaining function which must be performed in society where change and ego involvement is usually not involved (Havighurst, 1964).

In examining the diversity of viewpoints Hoyt et al. (1973) observe that differences occur with respect to the following variables: 1) the extent to which it is a K-12 or a K-adult program, or whether it extends from early childhood to retirement, 2) the extent to which its primary purpose is leading toward work or toward a totally fulfilled life, 3) the extent to which it is all of education or only a part of education, and 4) the extent to which it is an educational program or an entire community program.

It has been only recently that writers in the elementary school guidance field have turned some of their attention to career guidance and related topics. Leonard in 1971 started a regular column on career guidance in the *Elementary School Guidance and Counseling* journal. Prior to that time there were only three articles (Bugg, 1969; Hansen & Caulfield, 1969; and Jefferies, 1968) dealing with the topic in that periodical. There were however, other earlier articles on the general topic published in the *National Vocational Guidance Quarterly*, a publication, which focuses almost exclusively on vocational guidance, career development, and career guidance.

When comparisons are made as to who is writing or developing materials about career development for elementary school children and those who are developing comprehensive models of elementary school guidance it appears there are two distinct groups making contributions operating from somewhat different theoretical viewpoints. The career development writers draw heavily upon the work of Super (1957) and others who draw upon developmental psychology, occupational sociology, psychological measurement, etc. The developmental elementary school guidance writers also draw upon developmental psychology and psychological measurement but include contributions from child development and learning theory and research. However, there is considerable overlapping in that both groups draw from the various theories which pertain to human development.

Career Education for the Elementary School

In this section effort will be devoted to reviewing what the various career education writers recommend for the elementary school level. Hoyt et al. (1972) summarize the thrust of the elementary school career education program:

> at the elementary school level, the components of career education most needed will emphasize helping students acquire positive attitudes toward work, toward all levels of occupations found in the society, and toward themselves as prospective workers. It should provide introduction of some "hands on" acquaintance with both tools and machines as an essential part of the curriculum. It will certainly provide opportunities for elementary school students to visit in the occupational world and for representatives from that world to visit students in their elementary schools (p. 181).

The USOE model (Hardwick, 1971) suggests the following objectives for a program at the K-6 grade levels:

> To improve overall pupil performance by unifying and focusing basic subjects around a career development theme.
>
> To develop in pupils attitudes about the personal and social significance of work.
>
> To develop each pupil's self-awareness.
>
> To develop and expand the occupational awareness and aspirations of the pupils.

An EPDA Institute sponsored University of Minnesota summer workshop (1971) for elemenatry school teachers lists the following tasks for the elementary school:

Table 2

Life Stages and Vocational Development Tasks

Primary Years (K-3)

- Awareness of self
- Acquiring a sense of agency
- Identification with a worker
- Acquiring knowledge about workers
- Acquiring interpersonal skills
- Objectification of self before others
- Acquiring respect for other people and the work they do

Intermediate Years (4-6)

- Developing a positive self-concept
- Acquiring the discipline of work
- Identification with the concept of work as a valued institution
- Increasing knowledge about workers
- Increasing interpersonal skills
- Increasing objectification of self before others
- Valuing human dignity

Bugg (1969) examined the major theories of career choice — Bordin, Ginzberg, Holland, Hoppock, Roe, Super, Tiedeman and O'Hara — and noted some general implications for the elementary school age child. It was concluded that elementary school guidance services should: 1) offer counseling assistance for self-understanding and personal development, and 2) a well-formulated program of broad, general occupational information which can serve as a foundation for later career decisions. The school should help children to understand the meaning of work in our society and provide information about the wide range of occupational opportunities. Worker and job differences as well as the varying kinds of rewards should be explained. The physical, social, and training requirements of the different fields should be understood and finally children should come to understand they, too, will work and that the choices they make will have considerable influence upon them personally.

In a recent article Bender (1973) discussed vocational development for the elementary school. Objectives include:

> Broaden students perceptions to various occupational attitudes and opportunities
>
> Broaden students' self-concepts
>
> Increase awareness to various phases of work and career
>
> Provide adequate student and adult models to increase perception of occupational awareness
>
> Relate educational curriculum to world of work.

The major program thrust of this approach is upon a job application procedure at each grade level whereby students apply

for classroom jobs for each grading period. Students progress up through the system and become familiar with the general requirements of a variety of school jobs.

Hill and Luckey (1969) summarized vocational development theory and research with special significance for the educational experience of children age five to about age twelve:

1) The processes of growing up, and of meeting the developmental tasks of childhood, entail many understandings and attitudes that have occupational significance and meaning.

2) The processes of identification with adult models who have a strong effect upon the development of their sense of occupational identity begins early in life and persists throughout the elementary school period.

3) The child develops conceptions of himself and these self-concepts have a profound effect upon his vocational development.

4) The processes of vocational development are mostly adequately suited to the realities of today's world of work if the child early begins to understand and to plan for a life in which change in his work is to be expected, and to be faced with courage.

5) The understandings and attitudes, the conceptions of self, the adoptability and creativity needed in the processes of educational and vocational planning, all are strongly influenced by the child's parents and by his home relationships.

6) Occupational choices and the characteristics' of workers in various occupations have been shown to reflect the interests, the values, the needs, the abilities, and the life styles of these workers.

Hoyt et al. (1973) identify what a child would be able to do after being a part of a career education at the elementary level:

Discuss his interests as they relate to work and play behaviors

Distinguish among people who work with others, ideas, or things

Recognize worker interdependence within the home, the school, and the business community

Make connections between school subjects and employability skills

Role-play or visually depict the worker personality characteristics associated with people who produce goods or services or both

Discuss the likenesses and differences between himself and his family members, his schoolmates, and others who are significant in his life

Consider the many reasons why people work

Attach worth and value to all who work, either for themselves or for others

Display an optimism about himself in direct proportion to the number and quality of direct contacts he makes with people who work

There are some additional thoughts and views which need to be examined before making a final determination as to what should be included in conceptualizing a career guidance model.

Some Additional Inputs

There is considerable concern about the justification for stressing traditional value orientations to the world of work. For example, Nash and Agne (1973) question whether or not the corporate reality principle which stresses high production, accelerating rates of social change, systematic administration, increasing rates of economic growth, large organizations, and a technical approach to solving human problems should still be considered valid. Reich (1970) feels that our technological society has actually deprived man of his search for self. Glasser (1972) sees individuals moving away from a power orientated society toward one which stresses role identity through involvement. Fromm (1968) has stated: "This society produces many useless things, and to the same degree many useless people. Man, as a cog in the production machine, becomes a thing, and ceases to be human . . . Hence, he feels powerless, lonely, and anxious. He has little sense of integrity or self-identity" (p. 38-39). With a depletion of the world's mineral resources and high environmental pollution the suggestion that a more controlled economy should be more seriously considered is perhaps becoming increasingly a viable alternative.

The President's National Goals Research Staff (1970) entitled *Toward Balanced Growth: Quantity with Quality* stressed this point:

> At the beginning of the seventies a seemingly new aspect has been added to the list of (national)

> goals. The search for "quality of life" and the appeal for reordering the national priorities embody the essence of this new aspect. These concerns mirror a desire by many Americans to create a society better able to enjoy what it produces, and to grow in ways harmonious with the physical environment (p. 149-150).

While workers want to like their work and accept responsibility there is a need to develop additional innovative approaches to more fully involve the worker. There is still considerable stress on external rewards. Some promising innovative approaches include: worker selected job tasks for the work week, group planned work activity through consultation, and job enrichment (Drucker, 1973). Reich (1970) is less optimistic about the worker and his feeling for the jobs and what it means whether blue collar or professional.

There is evidence that some youth seem to be little motivated to increase the GNP as a central focus for personal achievement. The NVGA-AVA statement recognizes that the classic work ethic so important in the early development in this country no longer constitutes a viable set of work values for many workers. "In recent years, the emergence of some new values and a change in the relative importance of others is markedly altering the nature of jobs and organizations, and for many persons, their career development." Other values are surfacing such as friendship, privacy, freedom of opinion and emotional expression, the family, and nature (Nash and Agne, 1973). It is also pointed out that there is some contradiction in the concept of career education due to the uncertainty of the world of work and inability of many trained workers to be employed.

Conceptualizing the occupational world around the fifteen job clusters represents a narrow view according to Nash and Agne (1973):

> What is most disconcerting about collapsing the learning experience into such specialized boxes as "occupational clusters" is that educators sell their souls for a view of life superficially utilitarian. This view is fragmented because students gain insight only into the nature of outer reality; they neglect their inner nature — the intuitive and emotional life dependent for its sustenance on the arts, humanities, and religion. Unfortunately, there is an inexorable logic to specialized education: When persons are locked into one mode of thought or specialty, they become impervious to new ideas and experience.

> As long as career education remains highly specialized, human beings will continue to be separated from the totality of their experiences (p. 376).

A concept understressed in career development according to Hoffman & Rollin (1972) is Toffer's (1970) speed of transcience or the phenomenon of rapid change which tends to separate man from the past. The temporariness of some work assignments is another aspect disconcerting to workers although Bennis and Slater (1969) feel that people, both worker and the family, can successfully learn to form deep short-term relationships, separate and start over again with another work group or community.

Super (1957) and many of the writers who quote him stress that one may hope to implement his self-concept through work. Seldom quoted is another proposition about career development which states that for some the central focus of life will come from noncareer activities. Havighurst's estimates (Table 3) that only about a third of the labor force derives ego involvement in career activity. For most workers their tasks center around a society maintaining function with little personal involvement. Reich (1970) goes even further. "For most Americans, work is mindless, exhausting, boring, servile, and hateful, something to be endured while 'life' is confined to 'time off' " (p. 7).

Table 3

Occupations as Related to Types of Job*

Occupation	Percentages of the Labor Force in Given Types of Jobs, About 1960	
	Ego-Involving	*Society-Maintaining*
Professional (except teachers)	4	0
Teachers	2	0.5
Business owners and managers	13	3
Farm owners	4	1
Sales and clerical workers	4	14
Skilled workers	5	14
Semiskilled workers	1	28
Unskilled workers	0	6.5
Total	33	67

The individual is unable to grasp and respond to all relevant information he needs in decision-making. As a result, he utilizes various strategies to cope with his overwhelmed condition. Such strategies include dinal of reality, keeping pace through specialization of a small sector, reversion to previously successful rou-

tines considered to be inappropriate, and oversimplification or seeking simple solutions to everything (Toffler, 1970). Learning to adapt to change should be taught and Hoffman and Rollin stress "What is important about wrestling with self-knowledge, self-assessment, and life styles is both the process and the outcome — observing how one gets where he gets is a valuable learning experience."

Carl Rogers (1973) in a recent article discussed what the "good life" is like for some individuals he has worked with in counseling and encounter groups. In addition, to viewing themselves as *process* or a growing organization, they place increasing trust on their own judgments and values and become less dependent upon institutions for direction. Fromm (1968) points out that man in the one-sided emphasis on technique and material consumption has lost touch with himself, with life (p. 2). Reich (1970) indicates "The task of the new generation is to see humanity in all men, and to work for the renewal, the rebirth, the return to life, of all men" (p. 320). Shane (1973) urges educators to press society for a clearer definition as to what is the "good life" so as to better guide children. It is obvious that the relation between life style and work values must be clarified.

Concern was expressed by Nash and Agne (1973) over the structured approach to career education programs (sequentialism, fundamentalism, and credentialism). Other approaches they suggested include "helping students to explore, discover, and test a number of personal competencies . . ." Another consideration offered is that "a student learns to discover for himself the worth and meaning of an experience, the methods for arriving at and assessing that experience, and the implications an experience has for his private and public worlds. Evocative education prepares students, not merely to make a living, but to live a full life, free from boredom and excessive striving after meretricious credentials" (p. 377). The Association for Supervision and Curriculum Development (1962) in a yearbook (*Perceiving, Behaving, and Becoming*) discussed ways in which the school can become restructured to assist students in identifying meaning and purpose in experience. The need for a broader approach to the concept of career defined by the individual and on his own terms is also underscored by Reich (1970) :

> What is beginning to evolve is the concept of a "noncareer" or "vocation." The old way of choosing a career was to find what one was "best suited for." That is, the individual reviewed the list of all the functions that society wanted filled and was prepared to pay for, then tested his own abilities, and

> finally fitted the two together as best he could. Finding a noncareer requires a better knowledge of self to start off with; a decision, necessarily tentative, about what one would find most satisfying and fulfilling. This decision is not, of course, made with total indifference to the needs of the community, for one vital aspect of satisfaction is the sense of helping people. But the starting point is the question of what would affirm the self, and this offers its own answer to how the individual can best contribute to his fellow men (p. 400).

The above discussions considered to be highly relevant to many writers for the most part have not been integrated into the conceptualizations of career education programs. Such ideas carry the ring of urgency and ought to be included in any comprehensive model of career education.

Selected Studies on Career Development and Career Education at Elementary School Level

There have been a few studies which reveal some of the specifics regarding children's understanding of the world of work, their work related values, parental attitudes, and efforts to increase their understanding of work.

Roberts (1972) reported on a survey of elementary and middle school teachers to determine their attitude towards and status of vocational information and activities in classes of teachers surveyed. Teachers indicated a willingness (no per cent reported) to integrate such information if resources were made available. A second survey made of elementary students (6-7-8) indicated the majority (78%) of them thought this type of information should be incorporated into the curriculum but at the present it was not being offered (89%).

Gunn (1964) in an effort to learn the reasons children (boys) rank occupations asked 20 subjects in each grade 1 through 12 to rank 11 jobs in terms of their community standing. Ranking of occupations by grade level approximated Piaget's theory of conceptualized learning about game rules — the five and six-year old belongs to the stage of egocentrism; the seven to ten-year old belongs to a "cooperative" stage where attempts are made to make games social; and older children were seen as "rule happy" seeking out exceptions. Boys below grade 4 ranked policemen number 1 and beginning with that grade and above ranked doctor as number 1. It was not until grade 7 that all jobs were ranked. No boy in the first six grades used the term social class. Beginning in grades 7, 8 and 9 boys began to be aware of other

than a service consideration as a basis for classifying jobs (money, job attributes, psychological rewards, education, and power). The boys in grades 10, 11, and 12 ranked the jobs essentially the same as adults and accepted social class as a fact.

Hansen and Caulfield (1969) investigated the agreement between upper elementary boys with their fathers on occupational prestige, ideal and expected occupations, and the requirements for an ideal occupation. There was considerable agreement between boys and fathers rank ordering of a list of occupations on prestige. In comparing ideal career choice with expected career the father's ideal choice and the expected was higher at all grade levels (4, 5, 6) than their son's although it deviated with year of schooling. No boys had higher-level occupational choices at each grade level. In ranking ideal job requirements boys at all three grade levels ranked "opportunity to be helpful to others" in their top three choices. Fathers ranked an "opportunity to use special ability and aptitude" and "a stable, secure future" in their top three choices. Implications for establishing future career education programs include, according to the authors, assisting pupils with self-understanding, career awareness for parents, and relating pupil interests and abilities to his future occupational development.

Hales and Fenner (1972) conducted a study to determine the intensity with which 5th, 8th and 11th grade students value the variables assessed by the Ohio Work Values Inventory. The results showed that children and youth from a small rural school district value work which is steady and dependable, pays reasonably well, permits them to utilize their skills and interests, and benefits their people. This means a valuing of both extrinsic (security and money) and intrinsic (self-realization and altruism) qualities. There were only two significant differences out of ten comparisons between the three grade levels. Thus, children appear to formulate work values rather early. The older students (11th grade) placed a higher value on self-realization and altruism than the younger students (5th and 8th grades).

A comparison of gifted elementary children's career choices with that of their parents was the thrust of a study by Barbe and Chambers (1963). Gifted children in grades 3 through 6 and their parents reacted to Rosenberg's "Requirements for Ideal Job or Career." The children listed having an opportunity to be helpful to others as most important, while their parents listed an opportunity to use their special abilities as most important.

Tennyson and Monnens (1963) examined elementary readers and found that occupations presented represented only a small

number of jobs in the world of work. Congressman Lehman (1973) recently examined a small sample of elementary school textbooks in Washington, D.C., and found sex stereotyping of work roles represented with women shown in such jobs as teacher, nurse, salesperson, stewardess, and librarian. Men were shown as firemen, storekeeper, doctor, mailmen, carpenter, pilot, etc.

A study designed to discover the degree to which elementary school children hold stereotypes about occupations based on sex was conducted by Schlossberg and Goodman (1972). Children from kindergarten to sixth grade responded to 12 drawings — six traditionally feminine and six traditionally masculine. While there was no significant increase from grade to grade on stereotyping, the model cities sixth graders held more stereotypes than the middle income school. There was a tendency for children to exclude women from men's jobs than to exclude men from women's jobs. Their personal choices of jobs fell within the usual stereotyping. The need for intervening early is obvious if one wishes to broaden the horizon of children especially girls.

Counselors assigned half-time to a vocational guidance program in grades two, four, and six was studied by Goff (1967) to determine the effect on occupational knowledge, vocational aspiration and realism of occupational choice. Three conditions were examined: 1) a teacher led class, 2) a counselor led class, and 3) a combination teacher-counselor led class. No method was found superior to another and while experimental groups gained significantly on all three variables there was also some significant gains with the control groups possibly attributed to contamination. Level of aspiration was positively and significantly related to school ability and achievement.

A fifth grade class was exposed to a series of 50 minute daily sessions for 18 days in study reported by Thompson and Parker (1971). The unit was planned cooperatively by the teacher and the counselor. The classroom teaching was handled by the teacher. The counselors assisted with the group counseling sessions, materials, and field trip arrangements. Focus of the unit was on 1) work in the community, 2) why people work, 3) relevancy of school to future work, and 3) changes in job market. The results favored the treatment group over the control group significantly on the following variables: community's five main employers; parent's occupations; workers the community needs; five ways of getting a job; and list six things a dependable worker will do on the job. The general feeling toward the activity was quite

positive, in fact, the control demanded the same treatment for them. Other similar units were planned and presented to both older and younger pupils.

The evaluation of the eight exemplary Minnesota demonstration projects reviewed in chapter six has been completed by the Vocational Research Unit at the University of Minnesota (Smith, 1974) and the preliminary results indicate that there was no significant difference between the pupils' scores on career education variables and control pupils. Some teachers have questioned the relevancy of the test items to their classroom career education content. More organized separate units systematically applied are suggested.

Roe (1964) in reviewing previous research and her own research results could not find verification of her general hypotheses that vocational choice is predictable from a knowledge of parental child rearing attitudes. Further evidence that vocational development is undeveloped is Super and Overstreet's (1960) research on ninth grade students' vocational maturity. They found vocational preferences unstable and student readiness to devote effort to such decision limited. Counseling and guidance efforts relative to making vocational plans and choices at the junior high level may be premature although Super and Overstreet encouraged promising efforts to foster vocational maturity. Programs should be developed to short circuit sex stereotyping which takes place in childhood mostly to the disadvantage of girls (Kogan and Moss, 1966).

Borow (1966) offers considerable speculation as to promising avenues of inquiry in search of those early qualities which might be found related to occupational behavior. Promising areas suggested include: 1) competence and coping behavior; 2) independence; and 3) achievement behavior. It is apparent that there is little research linking child development to occupational behavior and Borow cautions against going beyond present knowledge:

> Because of the appealing integrative flavor of such theoretical systems and because they seem to explain so much there is a persistent tendency among among counseling psychologists and vocational guidance personnel to misconstrue postulate and hypothesis as fact. That the existing body of credible empirical principles in vocational development is still a modest one makes the temptation to commit this error even stronger (p. 398).

Roe (1964) suggests that practical career predictions with our present state of knowledge may not go farther that one choice

point to the next. Perhaps our efforts should be directed to clarifying further how children of various ages perceive the world of work as a basis for formulating curriculum content.

In the next section various proposals as to the counselor's responsibilities for career education at the elementary school level will be examined.

What is Suggested for Counselors?

In general, it is suggested that counselors serve children directly through counseling individually and groups, classroom guidance, and consultation with teachers, parents and community worker groups. Team teaching, in-service education and serving as a member of coordinating committees is also indicated.

Most of the career education writers stress the responsibilities of the school in general and teachers in particular. Only a few writers discuss the role of the elementary school counselor. Hoyt et al. (1972) are critical of counselors and counselor educators for lack of proper attention to career education. It is felt that counselor training should include competence in student assessment and in the psychology of learning, of individual differences, of personality development, and of career development. In addition to counseling methods and procedures and a supervised practicum counselor training should include understandings of both economics and sociology. Substantial work experience outside of education is stressed. Personal qualities which inspire trust and confidence is also emphasized by these writers.

The joint NVGA-AVA statement really contributes very little in clarifying what counselors do in career education for while it specifies what academic teachers, vocational educators, principals, parents, peers, and employers might do it leaves a list of ten responsibilities to a "guidance team of specialists" which includes elementary school counselors. The guidance team is to serve as facilitator and agent of change in 1) assisting in school curriculum development and instructional methods, 2) assisting the individual in his career development, and 3) communicating with parents and others. The responsibilities suggested for such a team includes the following:

A. Program Leadership and Coordination

Coordinate the career guidance program.

Provide staff with the understandings necessary to assist each student to obtain a full, competency-based learning experience.

Coordinate the acquisition and use of appropriate occupational, educational and labor market information.

Help staff understand the process of human growth and development and assess needs of specific individuals.

Help staff plan for sequential student learning experiences in career development.

Coordinate the development and use of a comprehensive, cumulative pupil data system that can be readily used by all students.

Identify and coordinate the use of school and community resources needed to facilitate career guidance.

Coordinate the evaluation of students' learning experiences and use the resulting data in counseling with students, in consulting with the instructional staff and parents, and in modifying the curriculum.

Coordinate a job placement program for the school and provide for job adjustment counseling.

Provide individual and group counseling and guidance so that students will be stimulated to continually and systematically interrelate and expand their experiences, knowledges, understandings, skills, and appreciation as they grow and develop throughout life.

B. Student Direction

Help each student realize that each person has a unique set of characteristics and that, to plan realistically, each must appraise himself fairly.

Enable each student to make use of available assessment tools and techniques in examining his personal characteristics.

Assist students in identifying realistic role models.

Assist students in developing the employability skills necessary for entry into employment where opportunities exist.

The person qualified to coordinate the total guidance program should be one, according to the writers of the NVGA-AVA statement, possessing the following competencies:

A thorough understanding of career development theory and research.

Group process, human relations and consultative skills.

A knowledge of curriculum and how curriculum is developed.

An understanding of the relationship between values, goals, choices and information in decision-making.

A knowledge of the history of work and its changing meanings.

An understanding of the changing nature of manpower, womanpower and economic outlooks.

Familiarity with various strategies and resources for facilitating career development, including the utilization of the school, the community and the home.

Gysbers (1973) has suggested in Tables 4 and 5 ways in which counselors may contribute through in-service education, consultation with teachers, parents, and employers in program planning and development. Direct contact suggested with children in various activities in the classroom is much the same as that identified and evaluated by elementary school guidance personnel in Minnesota (Miller, 1973).

Table 4

Guidance Responsibility Assignment: Some Examples

Type of Responsibility	Counselors	Teachers
Indirect	In-service education programs	Parent-teacher conferences
	Organize occupation of month program	Develop materials for occupation of month program
Shared	Team teaching occupational units	Team teaching occupational units
	Joint employer-counselor planning	Joint teacher-parent-student planning
Direct	Small group career exploration groups	Conducts occupation of month program
	Individual counseling	Student organization advisement

Table 5

Elementary School Counselors

	Student Objectives	Student Outcomes	Direct Counselor Functions
Direct Contact	For the individuals to develop an awareness of their own characteristics.	Given a picture of himself, a child will be able to describe aloud his appearance using accurate descriptions.	Counselor conducts weekly group activities using puppets, stories, pictures, audio recordings, self drawings, and snap shots.
Indirect Contact	For individuals to differentiate job responsibilities in occupational clusters.	Given specific jobs in an occupational cluster, students will be able to name a unique aspect and a similar aspect of the worker's responsibilities.	Counselor will consult the teacher regarding media and arrange for a field trip for students to observe occupational cluster models.

Counselor responsibilities according to Bender (1973) is one of consultant to teacher in helping them plan and implement the activities for maximum student benefit. The counselor is also responsible for ideas, sources, and information which help in individualizing the program. The counselor in the suggested program also serves as important facilitation of positive interpersonal relationships between students and teachers.

The needs of inner-city children for career guidance has been discussed by Jefferies (1968). She stressed the need to encourage disadvantaged youth and identify successful adults within the units who might serve as role models. The role of the career guidance consultant in the Detroit Career Guidance Project is as follows:

Provide individual and group counseling to help children understand, accept, and appreciate their individual dignity and worth.

Arrange field trips to business, industry, and educational institutions with emphasis on job activity and qualifications.

Locate role models from the inner-city and invite them into the classrooms to help children see that "success"stories can be real for them, too.

Develop special programs, classes, and work activities in school for the specific purpose of guiding the children through career development.

Provide organizational information and other guidance services to help teachers make lessons more purposeful and realistic.

Organize small parents discussion groups and have individual consultations centering around the parent's role in career guidance.

Career Education in the Elementary School: A Broader Look

In examining the various viewpoints regarding career education for elementary school children it appears that two components emerge as common elements: awareness about the world of work and psychosocial awareness, both of them derived for the most part from career development which parallels human development. Career development theories offer much in explaining how one's career might develop over time by various stages but, there is little evidence except for sex stereotyping linking child development to occupational behavior. Another caution should be recognized and that is much of the research on career

development has been on professional workers where ego-involvement has been high but as Havighurst (1964) points out those in jobs where opportunities are high for self-development make up only about a third of the total work force. More recently there is evidence that some youths are adapting values counter to the traditional work values of high production, status, power, and wages. Privacy, friendship, freedom of expression, family and interest in nature are receiving increased attention as values by young people. Reality testing of multiple life styles is a delaying factor which could extend the establishment period in career development for some. The concern about *quality* in American life a major thrust of the President's national goals staff report (1970) and the work of others underscores the need for a change in attitude toward the concept of unlimited production in a world of limited resources and a polluted environment. This seems to support some of the shifting away from traditional work values. If this trend persists such a transition may necessitate a revision of career development theory.

In the absence of sufficient evidence to support the theory that there are linkages in childhood to occupational behavior it might be more appropriate with our present knowledge to think of the developmental factors as antecedents to career behavior. It is not until adolescence that vocationally relevant behavior becomes more pronounced. There is a stronger case building for psychological education since the relationships between developmental aspects and important human qualities seem to be more relevant and open to change. To conceive of psychological education as career education places unnecessary restraints on such a developing field. The NVGA-AVA statement, it will be recalled, acknowledged that career guidance was an integral part of human development and this is especially true with younger children.

A local program of elementary school guidance which already focuses on psychological education might expand its orientations to include awareness about the world of work to complete a two pronged approach to career education. The following assumptions appear to be an appropriate foundation upon which to build a career education program:

1) Feeling good about one's self, being accepted, and being able to have something to say about what happens in everyday life are important factors which contribute to success in school and work.

2) It is important to understand the relationship between life style, education, and work (including real or threatened unemployment). Children need also to under-

stand the positive and negative effects of both parents working on life style and family relationships.

3) Conceptualizing the world of work from fifteen occupational clusters is a manageable starting point to understand occupations but should not be considered as the only approach.

4) Career development is part of human experience and should be examined in terms of its potential contribution to one's total development. Each person should be assisted in the search for ways to facilitate the process of growth.

5) Specialization in one's career though it may contribute significantly to one's status and achievement is done so at the expense of not fulfilling other talents and interests.

6) Adjusting to change is an important factor to learn for it has implications regarding the temporariness of some work assignments, relationships of the worker to others, and the family in the community as well.

7) Due to the changing nature of the world of work occupational information except for the most general kind should not receive much attention at the elementary school level.

8) In a time of shifting away from traditional work values and the need to consider a planned economy in a world of limited resources the conditions are set for re-examination as to the relevancy of current theories of career development.

Counselors Active in Psychological Education

In examining the literature it appears that counselors have not only identified theoretical bases for psychological education but developed and validated techniques and methods in the affective domain — peer counseling (Sprinthall, 1973); achievement motivation (Alschuler, 1973); self-determined behavior change (Goshko, 1973); biofeedback and voluntary self-regulation (Danskin & Walters, 1973). The second major Minnesota elementary school guidance research effort (Miller, 1973) illustrates how elementary school counselors can be effective in additional personal-social areas — enhancing self-concept and/or peer acceptance (Pardew & Schilson, 1973; Darrigrand & Gum, 1973; Hammerschmidt & Smaly, 1973). Helping teachers and parents with interpersonal skill development and improving understanding of human behavior is another important contribution where Minnesota counselors have demonstrated their effectiveness (Haversack & Perrin, 1973; Campion, 1973; Berger & Haversack, 1973).

In the first Minnesota elementary guidance research effort (Miller, Gum & Bender, 1972) it was demonstrated that differential counselor impact was a function of how the counselor spent his time and energy across a number of function variables. A *developmental* oriented role was associated with significant increases in pupils' sense of control, reduction in school anxiety, and increase in staff openness to others; a *remedially* oriented counselor role was associated with childrens' perception of counselor helpfulness, real and ideal self-concept; peer acceptance, and academic self-concept; a *combination of remedial and developmental* approach to the job was related significantly to parent guidance attitude, teacher perception of counselor helpfulness, staff openness to others, staff openness to the counselor, and staff perception of guidance functions. In general, counselor impact on pupil variables was associated more with either the developmental or the remedial approach, whereas most of the adult variables were associated with the combination approach.

Of special importance also is that precious research showing that personal-social variables relate to school achievement was reconfirmed in the 14 demonstration projects. The personal-social variables shown to be related to achievement were — peer acceptance, sense of control, academic self-concept, school anxiety (–), and discrepancy (–) between real and ideal self-concept. Coleman (1966) found that student attitude toward self and sense of control over the environment related more strongly to academic gains than curriculum, facilities or teacher background. Flanagan's (1967) comprehensive national study of over 400,000 students, concluded that schools generally fail to assist the student in developing a sense of responsibility for his educational, personal, and social development.

A most important contribution of the elementary school counselor then seems to be vis-ā-vis psychological education which in some ways follows the suggestions of Borow (1964). A second contribution is through cooperating with teachers, parents, and employers in planning and developing activities in and out of the school which help children to become more fully aware of the world of work and how work activity affects one's life.

The counselor's role identity must remain committed to the larger whole and that is facilitating the individual's total being from testing to find helpful competencies, to learning how to learn, to examining experience for personal meaning. Inside these broad responsibilities the counselor should be instrumental in assisting with program activities to facilitate such specific qualities as achievement motivation, goal setting, positive self-concept, acceptance of others, self-control, interpersonal skills,

value clarification, creativity, problem-solving, and self-directed thinking. How one relates to the world of work in terms of the promise it might hold for the individual is an important consideration the counselor should encourage the student to examine both for its intrinsic and extrinsic rewards. It is obvious that the external rewards affect one's life style and relationships with others.

Psychological Education Component a Shared Interest

Establishing programs to encourage the development of psychosocial characteristics is not new for as was pointed out in the beginning of this paper facilitating individual self-understanding and interpersonal competence are important components of elementary school guidance models. The NVGA-AVA career guidance and career development statement recognizes too, that its elements are a part of human development. Alschuler (1973) points out that the goals of psychological education are more effectively reached through working with the several relevant systems of which the individual is a part.

Concomitant with these two program developments, elementary school guidance and career education, are other trends which are gathering on the horizon. The Minnesota Human Relations regulation (Edu 521) which is concerned with pre-service and in-service education of teachers and other school staff regarding the affective aspects of education. Drug education while concerned with the chemical aspects of the misuse of drugs is also interested in the psychological factors and helping individuals understand the importance of value decisions and their relationship to personal development (Minnesota, 1972). Another significant emergent force is that both language arts and social studies curriculum decision makers (see for example Wangen, 1973; and Starvianos & Glanville, 1973) have begun to include interpersonal communication, self-understanding, intergroup education, decision-making, and related concerns in these curriculum areas. Environmental education is also interested in developing such personal qualities as self-awareness, self-reliance and problem-solving.

The convergence of various disciplines (elementary school guidance, career education, human relations, social studies, language arts, sex and family life education, mental health, drug education, and environmental education) on psychological education appears to provide an excellent opportunity for educators to cooperate in a common cause — to identify methods and procedures which create learning environments that facilitate more thoughtful self-directed persons and future workers.

APPENDIX A

Additional Selected Career Education Activities

Some additional suggestions for program development might be helpful in identifying promising practices and activities.

Forty school districts in New Jersey are reported to be using a "hands on" program sponsored by federal funds and the Ford Foundation. Forty-seven learning episodes are available and include tools and activities to better understand the world of work. Activities range from "candle making" (3rd grade), to a "a Rubber Stamp Business" (5th grade) which started with a $170 local bank loan. The $850 profit was used to finance a trip to New York City.

Hansen and Borow (1973) reviewed promising models and programs in a recent publication sponsored by the National Vocational Guidance Association, however, most of the examples are from the secondary level. An earlier NVGA publication by Hansen (1970) is another source which contains additional suggestions for career guidance programs.

Allen and Baruth (1973 reported on a system of using paper money as a token reward for achievement in school. "Money" can be used to bid on donated bake goodies, used toys, or banked. Children also learn to write checks and to balance their checking accounts.

The ABLE program of DeKalb, Illinois, draws heavily upon the community resources for assistance in executing various career education units (Werrick, 1972). A program for handicapped (orthopedically and neurologically) children involving the counselor, two orthopedic therapists, and the special education coordinator has been described by Phillips (1972).

Carter (1972) has developed and field tested a career game which involves each player to compete against the others in building a rocket (by hiring appropriately trained workers).

Helling and Ruff (1973) offer helpful suggestions as to activities which teachers and counselors might consider for portions of a career education program. Further sources for assistance in implementing specific activities may be found in the following: relating field trips to curriculum — Smith (1973); illustrating job interdependence — Rost (1973); the popcorn factory — Hedgepeth (1972); career word games — Brooks (1972); career role playing — Shreve (1972); an elementary school employment service — Jackson (1972); and classroom

group guidance activities dealing with self-concept, value clarification, and social behavior — Miller (1973) ; Fedora (1971) and Schreiber and Black (1972). See Schilson's Bibliography (1971) as a general resource which includes a section on vocational guidance.

BIBLIOGRAPHY

Alschuler, A. S. *Developing Achievement Motivation in Adolescents: Education for Human Growth.* Englewood Cliffs, New Jersey, Educational Technology, 1973.

Asscociation for Supervision and Curriculum Development. *Perceiving, behaving and Becoming.* Washington, D.C. 1962 Yearbook.

Bailey, L. J. & Stadt, R. Career Education: New Approaches to Human Development. McKnight: Bloomington, Illinois, 1973.

Bank, I. M. Children explore careerland through vocational role models. *Vocational Guidance Quarterly,* 1969, *17,* 284-289.

Barbe, W. B. & Chambers, N. S. Career requirements of gifted elementary children and their parents. *Vocational Guidance Quarterly,* 1963, 11, *2,* 137-140.

Bender, R. C. Vocational development in the elementary school: A framework for implementation. *The School Counselor,* 1973, 21, (2), 116-120.

Bennis, W. G. and Slater, P. E. *The Temporary Society,* New York: Harper & Row, 1968.

Berger, M. & Haversack, D. Improving family communication systems. In G. D. Miller (Ed.) *Additional Studies in Elementary School Guidance: Psychological Education Activities Evaluated,* St. Paul, Minnesota Department of Education, Pupil Personnel Services, 1973.

Borow, H. (Ed.) *Career Guidance for a New Age.* Boston: Houghton-Mifflin, 1973.

Borow, H. Development of occupational motives and roles. In L. W. Hoffman and M. L. Hoffman (Eds.) *Review of Child Development Research,* Vol. 2, New York: Russell Sage Foundation, 1966, 373-422.

Borow, H. (Ed.) *Man in a World at Work,* Boston: Houghton-Mifflin, 1964.

Brooks, L. Career word games. *Elementary Guidance and Counseling,* 1972, 6,*(3),* 200-201.

Bugg, C. A. Implications of some major theories of career choice for elementary school guidance prams. *Elementary School Guidance and Counseling,* 1969, 3, (3), 164-173.

Campion, S. Comparison of two models of parent education. In G. D. Miller (Ed.) *Additional Studies in Elementary School Guidance: Psychological Education Activities Evaluated,* St. Paul: Minnesota Department of Education, Pupil Personnel Services, 1973.

Ciavarella, M. A. We do need elementary school guidance, Mr. Ginzberg. *Phi Delta Kappan,* 1973, LIV, *(6),* 384-385.

Coleman, J. S. *Equality of educational opportunity.* U.S. Office of Education, OE 38001, 1966.

Danskin, D. G. & Walters, E. D. Biofeedback and voluntary self-regulation: counseling and education. *Personnel and Guidance Journal*, 1973, 51, *9*, 633-638.

Darrigrand, G. E. & Gum, M. F. A comparison of the effects of two methods of developmental guidance on the self-concept, peer relationships, and school attitudes of second grade children. In G. D. Miller (Ed.) *Additional Studies in Elementary School Guidance: Psychological Education Activities Evaluated*, St. Paul: Minnesota Department of Education, Pupil Personnel Services, 1973.

Dinkmeyer, D. C. & Caldwell, C. E. *Developmental Counseling and Guidance: A Comprehensive School Approach*. New York: McGraw-Hill, 1970.

Drucker, P. F. Beyond stick and carrot: Hysteria over the work ethic. *Psychology Today*, 1973, November, 88-92.

EDPA Institute: Career development and the elementary school curriculum. Minneapolis: University of Minnesota, College of Education, 1971 (mimeographed)

Erikson, E. H. *Childhood and Society*. New York: Norton, 1950.

Faust, V. *The Counselor-Consultant in the Elementary School*. Boston: Houghton-Mifflin, 1968.

Fedora, R. Developmental guidance materials for the elementary school. St. Paul: Minnesota Department of Education, Pupil Personnel Services, 1971 (mimeographed).

Flanagan, J. Functional education for the seventies'. *Phi Delta Kappan*, 1967, September, 27-33.

Fromm, E. *The Revolution of Hope*. New York: Harper & Rowe, 196S.

Ginzberg, E. *Career Guidance: Who Needs It, Who Provides It, Who Can Improve It?* New York: McGraw-Hill, 1971.

Glaser, W. *The Identity Society*. New York: Harper & Row, 1972.

Goff, W. H. Vocational guidance in elementary schools. *Dissertation Abstracts*, 1968, *28*, 3461A.

Goshko, R. Self-determined behavior change. *Personnel and Guidance Journal*.

Grams, A. *The Facilitation of Learning and Individual Development: Toward a Theory for Elementary School Guidance*. St. Paul: Minnesota Department of Education, Pupil Personnel Services, 1966.

Gum, M. F. *The Elementary School Guidance Counselor: A Developmental Model*. St. Paul: Minnesota Department of Education, Pupil Personnel Services, 1969.

Gunn, B. Children's conceptions of occupational prestige. *Personnel and Guidance Journal*, 1964, 42, *6*, 558-563.

Gysbers, N. C. & Moore, E. J. Career guidance: Program content and staff responsibilities. *American Vocational Journal*, March, 1972.

Gysbers, N. C. A comprehensive approach to career development and guidance. Presentation at Career Development and Guidance Workshop, Ann Arbor, Michigan, June 29-29, 1973 (mimeographed).

Gysbers, N. C. Critical issues in career education. A speech presented at the Conference on New Dimensions on Career Education, Virginia Polytechnic Institute and State University, 1973. (Mimeographed.)

Hales, L. W. & Fenner, B. Work values of 5th, 8th and 11th grade students. *Vocational Guidance Quarterly*, 1972, 20, *3*, 199-203.

Hammerschmidt, L. A. & Smaby, M. Effects of developmental guidance experiences on peer liking of fourth grade elementary students. In G. D. Miller (Ed.) *Additional Studies in Elementary School Guidance: Psychological Education Activities Evaluated.* St. Paul: Minnesota Department of Education, Pupil Personnel Services, 1973.

Handel, L. Three tips on career guidance activities (career corner, seminar, brainstorming). *Elementary School Guidance and Counseling.* 1973, 7, (4), 290-291.

Hansen, J. C. & Caulfield, T. J. Parent-child occupational concepts. *Elementary School Guidance and Counseling*, 1969, 3 *(4)*, 269-275.

Hansen, L. S. *Career Guidance Practices in School and Community.* Washington, D.C. National Vocational Guidance Association, 1970.

Hardwick, A. L. Career education: A model for implementation. *Business Education Forum*, 1971, 25, *8*, 3-5.

Haversack, D. L. & Perrin, G. Communication systems in the classroom: An in-service program to foster teacher growth. In G. D. Miller (Ed.) *Additional Studies in Elementary School Guidance: Psychological Education Activities Evaluated.* St. Paul: Minnesota Department of Education, Pupil Personnel Services, 1973.

Havighurst, R. J. Youth in exploration and man emergent. In H. Borow (Ed.) *Man in a World at Work.* Boston: Houghton-Mifflin, 1964, 215-236.

Hedgepeth, A. The popcorn factory. *Elementary Guidance and Counseling*, 1972, 6, *(3)*, 198-200.

Helling, C. E. & Ruff, E. *Career Guidance:* Career education monograph No. 6, Raleigh: North Carolina State University, Center for Occupational Information, 1973.

Hill, G. E. and Luckey, E. B. *Guidance for Children in Elementary Schools.* New York: Appleton-Century-Crofts, 1969.

Hoffman, S. D. & Rollin, S. A. Implications of future shock for vocational guidance. *Vocational Guidance Quarterly*, 1972, 21, *2*, 92-96.

Hoyt, K. B., Pinson, N. M., Laramore, D., and Mangum, G. L. *Career Education and the Elementary School Teacher.* Salt Lake City, Olympus, 1973.

Hoyt, K. B.; Evans, R. N.; Mackin, E. F.; and Mangum, G. L. *Career Education: What It Is and How To Do It.* Salt Lake City: Olympus Publishing, 1972.

Hoyt, K. B. Some thoughts on elementary school guidance. *Elementary School Guidance and Counseling*, 1967, 1, *(2)*, 91-102.

Jackson, I. The elementary school employment service. *Elementary School Guidance and Counseling*, 1972, 6, *(3)*, 285-286.

Jeffries, D. The needs of inner-city children for career guidance. *Elementary School Guidance and Counseling*, 1968, 2, (4), 268-275.

Kagan, J. & Moss, H. *Birth to Maturity.* New York: Wiley, 1966.

Knox, K. C. Student involvement in an expanded vocational guidance program. *School Counselor*, 1969, *16*, 202.

Lehman, W. Congressman testify on sexism in schools. *Guidepost*, American Personnel and Guidance Association, 1973, Vol. 16, *4*, p. 4.

Lyon, R. Vocational development and the elementary school. *The Elementary School Journal*, 1966, 66, 368-376.

Leonard, G. E. Career guidance in the elementary school. *Elementary School Guidance and Counseling*, 1971, 6, *(2)*, 124-126.

Leonard, G. E. Career guidance in the elementary school. *Elementary School Guidance and Counseling*, 1972, 7, *(1)*, 51-54.

Leonard, G. E. Career guidance in the elementary school. *Elementary School Guidance and Counseling*, 1972, 7, *(2)*, 150-155.

Leonard, G. E. Career guidance in the elementary school. *Elementary School Guidance and Counseling*, 1972, 6, *(4)*, 283-286.

Leonard, G. E. Career guidance in the elementary school. *Elementary School Guidance and Counseling*, 1972, 6, *(3)*, 198-201.

Marland, Jr., S. P. Marland on career education. *American Education*, 1971, 7, *(9)*, 25-28.

Meeks, A. R. *Guidance in Elementary Education.* New York: Ronald Press, 1968.

Miller, G. D. (Ed.) *Additional Studies in Elementary School Guidance: Psychological Education Activities Evaluated.* St. Paul: Minnesota Department of Education, Pupil Personnel Services, 1973.

Miller, G. D.; Gum, M. F. & Bender, D. *Elementary School Guidance: Demonstration and Evaluation.* St. Paul: Minnesota Department of Education, Pupil Personnel Services, 1972.

Miller, G. D. A suggested demonstration model for an elementary guidance consultant. In A. Grams *The Facilitation of Learning and Individual Development.* St. Paul: Minnesota Department of Education, 1966, 207-217.

Minnesota Department of Education. *Concepts of Chemicals: Drug Education Guidelines.* Curriculum Bulletin No. 36, St. Paul, 1972.

Munson, H. L. *Elementary School Guidance: Concepts, Dimensions, and Practice.* Boston: Allyn and Bacon, Inc., 1970.

Nash, R. J. & Agne, R. M. Career education: Earning a living or living a life? *Phi Delta Kappa*, 1973, 54, *6*, 373-378.

National Goals Research Staff. *Toward Balanced Growth: Quantity and Quality.* Washington, D.C., U.S. Government Printing Office, 1970.

National Vocational Guidance Association and American Vocational Association. Career development and career guidance: A joint position paper. Washington, D.C., 1973.

Pardew, E. M. & Schilson, E. A. Self-concept change: The efforts of a self-concept enhancement program on preschool children. In G. D. Miller (Ed.) *Additional Studies in Elementary School Guidance: Psychological Education Activities Evaluated*, St. Paul: Minnesota Department of Education, Pupil Personnel Services, 1973.

Phillips, L. Career development for handicapped youth. *Elementary School Guidance and Counseling*, 1972, Vol. 7, *(2)*, 154-155.

Reich, C. A. *Greening of America*, New York: Random House, 1970.

Ridener, J.; Allen, J. B.; and Baruth, L. G. Career guidance in the elementary school. *Elementary School Guidance and Counseling*, 1973, 7, *(3)*, 234-237.

Ridener, J.; Allen, J. B.; and Baruth, L. G. Technology for children; Careers of the Month Program; and Allen Dollars: A Method to Facilitate Learning. *Elementary School Guidance and Counseling*, 1973, Vol. 7, *(3)*, 234-237.

Roberts, N. J. Establishing a need for a vocational guidance program at the elementary and middle school level. *Elementary School Guidance and Counseling*. Vol. 6, (4), 1972, 252-257.

Roe, A. Personality structure and occupational behavior. In H. Borow (Ed.) *Man in a World at Work*, Boston: Houghton-Mifflin, 1964, 196-214.

Roe, A. & Siegelman, M. *The Origin of Interests*. Washington, D.C., American Personnel and Guidance Association, 1964.

Rogers, C. R. The 'good life' — a new definition. University of California, Regents. Copyrighted 1973, *St. Paul Dispatch*, November 26, 1973.

Rost, P. The career pyramid (interdependence of jobs). *Elementary School Guidance and Counseling*, 1973, 8, *(1)*, 52-53.

Sather, G., Sheggrud, D. B., and Handel, L. Career guidance in the elementary school. *Elementary School Guidance and Counseling*, 1973, 7, *(4)*, 287-291.

Sather, G. & Sheggrud, D. B. Promoting career education in the elementary school. *Elementary School Guidance and Counseling*, 1973, Vol. 7, *(4)*, 287-290.

Schilson, E. A. An elementary school guidance bibliography of books and journal articles. St. Paul: Minnesota Department of Education, Pupil Personnel Services, 1971.

Schlossberg, N. K. & Goldman, J. A woman's place: Children's sex stereotyping of occupations. *Vocational Guidance Quarterly*, 1972, 20, 4, 266-270.

Schreiber, R. W. & Black, M. *Elementary School Curriculum Guide:* Career education monograph No. 2, Raleigh: North Carolina State University, Center for Occupational Information, 1973.

Shane, H. G. Looking to the future: Reassessment of educational issues of the 1970's. *Phi Delta Kappan*, 1973, 14, *5*, 362-373.

Shreve, S. Career role playing with elementary school children. *Elementary School Guidance and Counseling*, 1972, 6, *(3)*, 284-285.

Smith, B. B. *A System for Evaluating Career Education Projects in Minnesota: 1972-73* Minnesota Research Coordinating Unit for Vocational Education, University of Minnesota, 1974.

Smith, H. M. & Eckerson, L. O. Guidance for children in elementary schools. U.S. Office of Education, OE-25032, 1963.

Smith, P. E. Relating field trips to the curriculum. *Elementary School Guidance and Counseling*, 1973, 8 *(1)*, 50-52.

Sprinthall, N. A. A curriculum for secondary schools: Counselors as teachers for psychological growth. *School Counselor*, 1973, 20, *5*, 361-369.

Sproull, L. Career education boondoggles. *Learning*, 1973, October, 38-41.

Stavrianos, L. S. & Glanville, D. T. *Man the Toolmaker.* Teacher's Edition Chicago: Follett, 1973.

Super, D. E. *Career Development: Self-Concept Theory.* New York: College Examination Board, 1963.

Super, D. E. *The Psychology of Careers.* New York: Harper, 1957.

Super, D. E. & Overstreet, P. L. *The Vocational Maturity of Ninth Grade Boys.* New York: Bureau of Publications, Teachers College, Columbia University, 1960.

Tennyson, W. W. & Monnens, L. P. The world of work through elementary readers. *Vocational Guidance Quarterly*, 1963-74, 12, 85-88.

Thompson, C. L. Fifth graders view the world of work scene. *Elementary School Guidance and Counseling*, 1971, 5, *(4)*, 281-288.

Toffler, A. *Future Shock.* New York: Bantam Books, 1970.

U.S. Office of Education. *Career Education: A Handbook for Implementation.* Washington, D.C., 1972.

Van Hoose, W. H. *Counseling in the Elementary School.* Itasca, Ice.: Peacock Publishers, 1968.

Wangen, R. K. Social studies assessment in Minnesota. St. Paul: Minnesota Department of Education, Division of Instruction, 1973. (mimeographed)

Wernick, W. The ABLE model program. *Elementary School Guidance and Counseling.* 1972, Vol. 7, *(2)*, 151-154.

Winters, R. A. Another view of the American work ethic. *Vocational Guidance Quarterly*, 1972, 21, *(1)*, 31-34.

CHAPTER SIX

EXEMPLARY CAREER EDUCATION PROJECTS: STATUS REPORT

William E. Stock*

Career Education in Minnesota, as a viable educational concept, predates the present ongoing efforts by a number of years. Pioneering activities in this kind of education were evident in random locations and at differing educational levels in the 1960's. These first efforts were usually the outgrowth of individual teacher initiative and were dependent upon local sources of funding or the ingenuity and enterprise of the persons involved.

Monies for funding exemplary programs in career education first became available to Minnesota in 1970 in the form of planning grant awards. At that time the Division of Vocational-Technical Education, Minnesota Department of Education, announced that interested educational agencies and organizations could apply for funds up to the amount of $2,000, to be used in planning and developing proposals for projects in career education. Over 40 applications were submitted for the planning grant awards, and a total of 13 schools were selected as award recipients. Educational agencies receiving these planning grant awards, and those choosing to use their own resources, then proceeded to develop proposals for exemplary projects in career education. Again, a large number of proposals were submitted from which eight sites were chosen. These sites were first funded as operational programs in 1971.

Thus, the 1971-72 school year was primarily a developmental year for the schools involved as activities related to in-service training of staff, procurement of supplies, materials, and equipment, development of curriculum/instructional materials, and development of implementation practices and procedures took place. With one exception then, the 1972-73 school year was the first year in which a significant amount of classroom activity involving student exposure to career education concepts took place.

The results to date of this project have been encouraging. The use of multiple sites has enabled different models of career

*Mr. Stock is a consultant with the Division of Vocational-Technical Education, Minnesota Department of Education.

education to be tested, has involved the entire range of the elementary and secondary school, and includes a representative sample of geographic and socio-economic locations unique to Minnesota (Figure 1). Because of the diversity of projects, personnel from most school districts in Minnesota should be able to visit a site having characteristics of interest to them and similar to their education situation (Table 1).

Figure 1

PART C PROJECT SITES

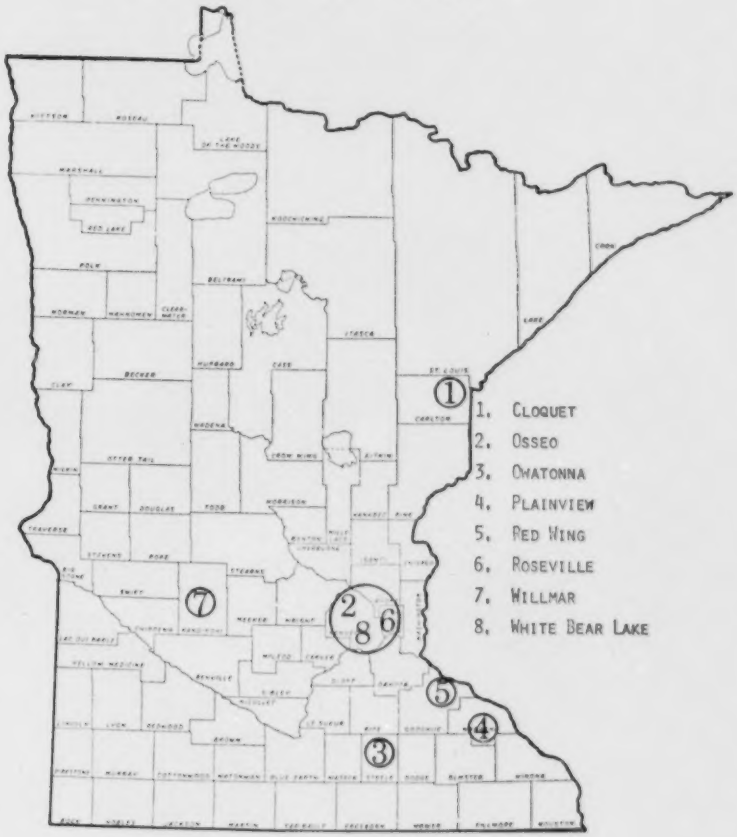


Table 1

Minnesota
Exemplary Projects in Career Education

Funded Under Section 131(a) of Part C of the Vocational Education Amendments of 1968 (Public Law 90-576), for FY 1973

Project Title	Sponsoring School(s)	Description of Local Projects
A Comprehensive Exemplary Program "Orientation to the World of Work" (Career Development K-12)	Independent School District #94 Cloquet, Minnesota	A comprehensive career education program has been developed and implemented at Cloquet with the assistance of community resource people. It is aimed at providing all students throughout their entire educational experience (K-12) with a series of related, comprehensive, systematically planned career educational activities. Emphasis at the elementary level, is on self-concept and attitude development of the student with an interdisciplinary approach and exploratory work experience programs utilized at the junior and senior high school levels, respectively. Performance contracting has been used as one means of developing and testing curriculum materials and encouraging staff involvement in the project.
Project TACO: Technology Assisted Career Orientation	Independent School District #279 Osseo, Minnesota	Three goals, summarized as Awareness, Appreciation and Attitude, and Decision Making, form the basis for a comprehensive career education project for one of the smaller suburban school systems in the metropolitan area. The project is being conducted on a pilot basis in the district with four elementary schools, three junior high schools, and the counseling and guidance departments in the senior high schools involved. Objectives have been developed and activities initiated which consider the needs of students, teachers, and the community.
Career Awareness Education	Independent School District #761 Owatonna, Minnesota	The career education project at Owatonna includes staff and students from both public and parochial elementary schools. All students and staff at this level are currently involved. Considerable effort has gone into the development of curriculum materials with a view to integrating career information into the ongoing curriculum. The goals of this project are: (1) to modify the attitudes of educators toward career development, (2) to change the attitude of the community toward a career awareness program (3) to integrate career awareness materials into the

Table 1 — Continued

Project Title	Sponsoring School(s)	Description of Local Projects
		elementary curriculum, and (4) to develop in students a positive attitude for all types of jobs.
Students, Parents, and Teachers Explore the World of Work in Southeastern Minnesota	Independent School District #810, Plainview, Minnesota and Winona AVTI Winona, Minnesota	Plainview has used a two phase procedure in implementing career education in its school system. The project started in its initial phase at the elementary level, K-6, with an upward progression into grades 7-9 in the succeeding phase. All learning experiences at both levels are integrated into the existing curriculum. Games, demonstrations, skits, role playing and audio-visual materials are used in the classroom in teaching about the World of Work, while field trips, resource people and individual and group projects are modes of instruction used outside the classroom. In addition to learning about the World of Work, emphasis is being given to teaching students about hobbies and leisure time activities.
Career Oriented Education in the Red Wing Public Schools	Independent School District #256, Red Wing, Minnesota	The Red Wing project was designed to culminate in an articulated, comprehensive (k-12) career education program to be conducted in six elementary schools, a junior high school and a senior high school. Principals of the elementary school aid in the orientation of teachers to World of Work concepts. Each building principal aids teachers in planning, promoting, and establishing career education projects within the classrooms, building, and the community. At the elementary level a strong emphasis is placed on involving parents as resource persons. Exploratory experiences at the junior high school have been implemented as specific units and projects within subject matter classes. These have been expanded with increasing activity from the various departments. Likewise, at the senior high school level projects have been initiated in various subject matter fields. In addition provisions for work experience and student job placement services are being developed.
A Developmental Career Development Elementary Program for Independent School District #623	Independent School District #623, Roseville, Minnesota	The career education project at Roseville is focusing on the elementary level, K-6. Its purpose is to develop and test effective methods for teaching occupational awareness in the context of a large suburban elementary school system. As such, the project has expanded hor-

Table 1 — Continued

Project Title	Sponsoring School(s)	Description of Local Projects
		izontally from its pilot phase to include numerous schools, teachers, students, and counselors at the elementary level. Considerable emphasis has been given, at this site, to the evaluation component of the project.
The Relevance of Community Resources Toward the Development of Understanding Occupational Opportunities and the Significance of the World of Work in the Willmar Public School	Independent School District #347, Willmar, Minnesota, Willmar Area Vocational-Technical Institute	The development of an articulated comprehensive career education program for a predominantly rural community represents the thrust of the project at Willmar. The project has progressed through a series of phases, involving the elementary, junior, and senior high schools. Major emphasis has been placed upon identifying and using community resources in the instructional process. Most of the project focus is upon working through the existing curriculum as correlated with the identified resources of the community. Separate career guidance activities are also an integral part of the project.
A Career Development Program, Grades 7-9, for Independent School District #624	Independent School District #624, White Bear Lake, Minnesota	White Bear Lake is a recent addition to the career education exemplary project, having been chosen as a replacement site for another suburban school. The focus at this site is upon the junior high school level (7-9) with two public schools and one parochial school involved. This project utilizes performance contracting and began with "already developed" curriculum materials procured from throughout the nation as a basis for developmental activities.

Evaluation Design for Career Education Projects in Minnesota

The evaluation component of the Minnesota Research and Development project in Career Education was predicated on the belief that the major purpose of evaluation is to provide information for program improvement. As such, a comprehensive evaluation system was designed and developed to provide the State of Minnesota with the requisite data and information needed to accomplish that purpose.

The total evaluation design included three types of evaluations: (1) a process evaluation of the quality and quantity of career education instructional activities, (2) a summative evaluation (using process and product data) conducted by the Minne-

sota Research Center Unit for Vocational Education (RCU), and (3) a third party evaluation conducted by an agency independent of the project, the Department of Education, and the University of Minnesota.

The purpose of this section is to briefly describe each of these types of evaluations, show how the separate evaluations were coordinated and provide examples of some of the data collection instruments used.

Career Education Project

The Career Education Program in Minnesota was perceived as one exemplary project consisting of eight separate school systems and cooperatively coordinated by the staff of the Division of Vocational-Technical Education, Minnesota Department of Education and the Minnesota RCU. Each project was selected because of the unique ways in which the concept of career education was to be implemented; some of the projects used a guidance and counseling model; others utilized primarily community resources; still others used combinations of these approaches supplemented with audio-visual and curriculum materials.

The basic rationale for the evaluation design was based on the concept of systematically collecting qualitative and quantitative data about the process and product outcomes of the career education projects and testing selected research hypothesis concerning the effectiveness of these projects. While there appear to be many ideas about how career education is to be implemented, there is little if any empirical evidence to support these ideas. Therefore, the major focus of the evaluation design for the state career education project was to provide an empirical, research base for making decisions about improving the quality and quantity of career education in the state as well as establish a normative base for evaluating other career education programs in the state.

Evaluation Design

The Minnesota RCU developed an overall evaluation design for the career education project which included (a) developing a rationale and model for career education, (b) developing a system of process evaluation (formative local evaluation), (c) developing product evaluation instruments assessing change in student performance, and (d) conducting a comparative, summative evaluation which related process outcomes to student product outcomes. Each of the elements of the evaluation design are discussed separately below.

Rationale and Model

Each of the projects has slightly different goals, purposes and objectives, therefore, it was necessary to first generate a rationale and model for career education which would serve as a normative standard for the state as well as provide a basis for developing instruments to measure both the product and process outcomes of career education. The rationale was predicated on the concept that the purpose of career education was to facilitate the career adjustment of both youth and adults (K-Adult). This may be accomplished by systematically (a) developing the career personality of each individual, (b) providing information about the career environment, and (c) teaching students about the process of career decision-making.

Formative (Process) Evaluation

The purpose of formative evaluation was to obtain qualitative and quantitative data concerning the processes used to implement career education in the eight sites. To accomplish this, an instrument and data analysis system was developed to collect self-evaluation data from both teachers and directors on a monthly basis. The teacher's instrument was designed to be read by an optical scanning device which writes the descriptive data to a magnetic tape. At the end of each month a computer printout, summarizing the data for *each* teacher was sent to each of the eight project directors. With this system of evaluation-feedback, information was available to both teachers and directors to make improvements and/or adjustments in the processes used to implement career education.

Data were accumulated over a six (6) month period and represent a normative base for the evaluation of other career evaluation programs in the state. The process data represent the independent variables which were used as a source of data for the summative evaluation. Examples of the teacher's and directors' self-evaluation forms are shown in Appendix A & B.

Product Evaluation

The product outcomes of career education consist of a series of achievement measures concerning "Education for Work." Parallel forms of each test were developed for grades K-3, 4-6, and 7-9. Lords (1962) item sampling scheme was used to generate the items for each form of the test and for developing norms for the total universe of test items. Using this scheme greatly alleviates the problems of test administration and norming; groups of students will respond to two (relatively short) parallel

forms of the same test, rather than having all students respond to one long form of one instrument.

Student achievement measures represent the dependent variables for the summative evaluation.

The first form of all tests were developed and pilot tested during the fall of 1972. All forms of the tests were administered to groups of experimental-control students in selected project sites. Item and test validation and reliability studies were conducted for grades K-3, 4-6, and 7-9. Based on these data, tests, and/or test questions were revised and reprinted. An optical scanner was used to read specially developed answer sheets to score student responses.

Summative Evaluation

The summative evaluation of the eight project sites will consist of a comparative evaluation of the career evaluation projects using the student achievement measures as the dependent variable and the process information as independent variables. Comparative analysis will be conducted for the following groups:

1. Comparison by grade level across the eight projects.
2. Comparison of grades K-3, 4-6, 7-9 of the eight projects.
3. Comparison of grade levels within each state (K-3, 4-6, and 7-9).
4. Comparison of experimental and control groups within and among programs.
5. Comparison of the eight projects in terms of hypotheses about the effectiveness of various instructional processes (process data).

Third Party Evaluation

A contract was entered into with an educational consulting firm to provide the third party evaluation called for in the regulation and guidelines attached to the grant. Briefly, in fulfilling their role, the third party evaluators, provided services designed to supplement and complement the total evaluation system. This includes factors related to (1) contextual analysis, (2) transportability, (3) cost/benefit analysis, (4) design review, and (5) program analysis.

CONCLUSIONS

The Research and Development Project in Career Education funded from Public Law 90-576, title 1, Part C, Section 131 (A) was operational from March 15, 1972, through September 15, 1973. During that period of time the project was conducted at eight sites in Minnesota with approximately 570 teachers and 17,000 students in grades 1-12 participating. A major purpose in conducting the project at eight different sites was to test alternative models of Career Education developed to meet the needs of students.

As a result of the experiences encountered during the conduct of this project, the following observations or suggestions are presented for consideration by educators contemplating the introduction of a Career Education Program into their school system.

1. Administrative support at all levels is vital to the successful development and implementation of a Career Education program.

2. Teacher involvement in all phases of planning, development, implementation and evaluation is important if Career Education concepts are to become a viable part of the ongoing curriculum.

3. A key person in the successful planning, development and implementation of a Career Education program is the program director. This individual must be provided with the authority, time and resources required to accomplish the task.

4. The in-service training of teachers is a critical factor in successfully developing and implementing a Career Education program.

5. Where the development of curriculum/instructional materials is necessary, time must be provided for teachers to accomplish this task. Summer writing teams and/or performance contracting are methods which have resulted in positive outcomes.

6. Evaluation should be addressed in a formal manner at the time of planning Career Education programs.

7. The more precisely the desired outcomes of the career Education program can be stated in behavioral or performance terms, the better the possibility that a measurable change can be shown in accomplishing those outcomes.

APPENDIX A

Weekly Log of Support Activities in Career Education
(Directors Form)

Name of Director _____ Project Name _____

Project Code Number _____ Date Reported _____

Directions: The purpose of this log sheet is to obtain information from the director about his activities and the activities of support staff which contribute directly to the success of the career education project. At the end of each week the director is encouraged to complete this form by (a) looking in retrospect at his activities and (b) obtaining relevant information about the activities of other support personnel.

General Administration Duties

	Number of Hours
General Project Administration-Supervision	
Securing Information and/or Consultation	
Attend Non-School Career Education Meetings or Conferences	
Project Evaluation	
Other (Specify) _____	

Promotional Activities Related to Career Education

Oral Presentations

	Number of Presentations	Total Amount of Time (Hrs)	No. of People Attending
Community and/or Social Groups			
Occupational or Advisory Groups			
Local School and School Board Personnel			
Non-Local Presentations			
Presentations at State or National Conventions			
Other (Specify) _____			

Printed Materials

	Number Produced	Number Disseminated	Developmental Time (Hrs)
News Letters			
Project Reports			
Visual Displays			
Booklets or Pamphlets			
Mass Media Releases			
Other (Specify) _____			

Career Education Materials

	No. of Different Material Purchased	No. of Different Material Developed	Man Hours of Developmental Time
Printed Instructional Materials-Aids			
Audio Visual Materials			
Resource Guide or Study			
Books-References			
Evaluation Materials			
Other (Specify) _____			

In-Service Career Education

	No. of People Attending	Total Hours Per Week	Total Man Hours/Week
Formal Workshops			
In-School Training Sessions			
Career Education Extension Classes			
Work Experience Programs			
Occupational Field Trips			
Other (Specify) _____			

Counseling and Guidance

	No. of Students Participating	No. of Teachers Participating
Individual Student Counseling		
Group Counseling		
Special Guidance Activities (e.g. Career Education Days)		
Career Education Center Library		
Consultation and/or Assistance to Teachers		

Form Completion Time: _____

MINNESOTA RESEARCH COORDINATING UNIT
FOR VOCATIONAL EDUCATION
University of Minnesota • Minneapolis, Minnesota 55455

APPENDIX B

ELABORATION OF CAREER EDUCATION OBJECTIVES AND CONTENT

A. Self Awareness

1. Mental and physical abilities and aptitudes—strength, vision, intelligence, etc.
2. School and work abilities and aptitudes—computational, mechanical, musical, clerical, etc.
3. Personality traits—attitudes, preferences, interests, values, impact on others and awareness of that impact, etc.
4. Educational needs, preferences, interests, goals, aspirations, expectations, etc.
5. Occupational needs, preferences, interests, values, needs, motivations, aspirations, expectations, etc.

B. Work Roles

1. Work in general—importance and desirability of work, social and economic considerations, changing roles, kinds of careers, etc.
2. Requirements of occupations or clusters—physical and mental abilities, educational level, working conditions (cleanliness, temperature), union and employer policies, etc.
3. Workers traits in occupations or clusters—mental and physical abilities, satisfactions, educational level, turnover, advancement, etc.

C. Planning Process

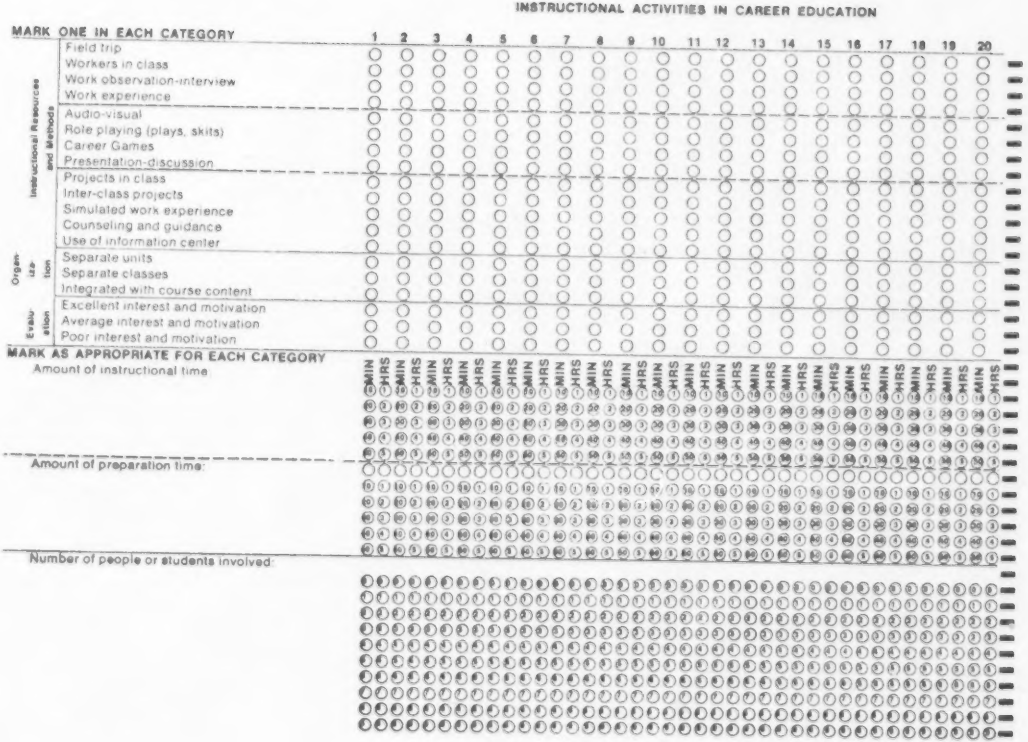
1. Relating work to non-work roles—leisure, avocation, social, political, etc.
2. Need for career planning—preparation, responsibility, autonomy in decision making, etc.
3. Processes of decision making—relating self to work roles, evaluating information, considering significant others, test out tentative choices, cope with or alleviate discrepancies, etc.
4. Locating and using information—resource materials, resource people, evaluating information, etc.
5. Career and education opportunities and availability—costs, time required, location, etc.
6. Educational role in planning—effects of educational choices, application of ability, etc.

D. Occupational Areas

1. Construction—buildings, streets, highways, airports, dams, canals, etc.
2. Manufacturing—making, assembling, maintaining or repairing labor saving, convenience, recreational, or luxury type appliances, materials or items, etc.
3. Natural resources—agri-business, mining, petroleum occupations, forestry, fisheries and and other marine occupations, wildlife conservation, environmental occupations, etc.
4. Transportation—transporting goods or people by air, land or water.
5. Marketing and advertising—storage, wholesale and retail distribution, outdoor advertising, modeling, commercial art, etc.
6. Communications—books, magazines, newspapers, radio, television, mail service, verbal assistance telephone service, etc.
7. Government and finance—elected or appointed governmental officials and occupations in governmental agencies, banking, stocks and bonds, etc.
8. Public utilities—electricity, gas, water, telephone facilities, sewer, etc.
9. Education and research—occupations in private or public educational institutions or schools and industrial training programs, and research concerning the education, behavior or welfare of people, etc.
10. Health and welfare—public or private health occupations, social welfare, economic welfare, police protection, fire protection, garbage collection, etc.
11. Recreation—management, supervisory, and service occupations in participative games, camping, fishing, boating, swimming, parks, recreational areas, etc.
12. Arts and entertainment—painting, sculpture, acting, dancing, music, writing (literature, etc.), professional athletics and games, etc.
13. Personal services—barber, cosmetologist, manicurist, chauffeur, bus boy, etc.
14. Consumer and homemaking—motel and hotel occupations, food service, tailoring, cleaning, homemaking, etc.

E. Occupational Levels

1. Professional and technical—teacher, doctor, engineer, consultant, lawyer, etc.
2. Managers and owners—business man, farmer, contractor, supervisor, business manager, etc.
3. Clerical—stenographer, secretary, clerk, bookkeeper, accountant, teller, etc.
4. Sales and service—sales, personnel service, auditor, routeman, partsman, cashier, etc.
5. Craftsman—mechanic, carpenter, plumber, engraver, embalmer, watchmaker, etc.
6. Operatives and laborers—truck driver, fork lift operator, carpenter's helper, custodian, dishwasher, etc.


INSTRUCTIONAL ACTIVITIES IN CAREER EDUCATION
MARK ONE IN EACH CATEGORY
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Instructional Resources and Methods
Field trip
Workers in class
Work observation-interview
Work experience
Audio-visual
Role playing (plays, skits)
Career Games
Presentation-discussion
Projects in class
Inter-class projects
Simulated work experience
Counseling and guidance
Use of information center
Organization
Separate units
Separate classes
Integrated with course content
Evaluation
Excellent interest and motivation
Average interest and motivation
Poor interest and motivation
MARK AS APPROPRIATE FOR EACH CATEGORY
Amount of instructional time:
MIN HRS
Amount of preparation time:
Number of people or students involved:

INSTRUCTIONAL ACTIVITIES IN CAREER EDUCATION

MARK ONE IN EACH CATEGORY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Instructional Resources and Methods	Field trip	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Workers in class	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Work observation-interview	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Work experience	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Audio-visual	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Role playing (plays, skits)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Career Games	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Presentation-discussion	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Projects in class	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Inter-class projects	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Simulated work experience	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Counseling and guidance	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Use of information center	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Organization	Separate units	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Separate classes	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Integrated with course content	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Evaluation	Excellent interest and motivation	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Average interest and motivation	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Poor interest and motivation	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

MARK AS APPROPRIATE FOR EACH CATEGORY

Amount of instructional time:

○ MIN ○ HRS

Amount of preparation time:

○ MIN ○ HRS

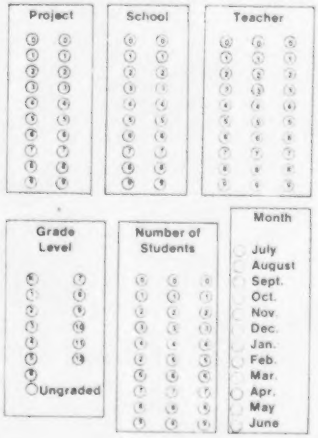
Number of people or students involved:

CAREER EDUCATION OBJECTIVES AND CONTENT

MARK AS MANY AS APPLY

Occupational Level(s)	Occupational Area	Planning Process	Work Roles: Workers	Work Roles: Requirements	Work Roles: General	Self Awareness	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
						Mental-physical abilities	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						School and work abilities	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Personality, attitudes	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Educational needs, goals	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Occupational needs, goals	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Importance of work	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Socio-economic impact	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Change in work roles	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Kinds of careers	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Ability requirements	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Educational requirements	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Working conditions	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Employment policy and demands	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Mental-physical abilities	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Needs and satisfaction	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Educational needs, goals	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Relating work to non-work roles	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Need for career planning	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Processes of career planning	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Locating and using information	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Career and education opportunities	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Educational role in planning	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Construction	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Manufacturing	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Natural resources	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Transportation	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Marketing and advertising	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Communications	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Government and finance	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Public utilities	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Education and research	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Health and welfare	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Recreation	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Arts and entertainment	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Personal services	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Consumer and homemaking	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Professional and technical	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Managers and owners	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Clerical	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Sales and Service	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Craftsmen	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Operatives and Laborers	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						Form Completion Time: Under 3 minutes	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						3-6 minutes	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
						over 6 minutes	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

IDENTIFICATION CODE



CURRICULUM AREA

- ○ UNGRADED ELEMENTARY
- ○ REGULAR ELEMENTARY
- SECONDARY SCHOOL SUBJECTS
  - ○ Language
  - ○ Math
  - ○ Science
  - ○ Social Studies
  - ○ Health
  - ○ Physical Education
  - ○ Fine Arts
  - ○ Practical Arts
  - ○ Vocational
  - ○ Other

TEACHER'S SELF EVALUATION OF CAREER EDUCATION INSTRUCTIONAL ACTIVITIES

Directions: The following six steps have been proposed to assist you in providing information about the instructional activities in your class that relate to career education and to insure that your responses will be read accurately by the optical scanning device.

Step 1: Follow the simple rules for making responses on the form:

Use only a Number 2 or softer black lead pencil
Make heavy black marks that fill the circle *completely*
Erase cleanly any answer you wish to change
Make no stray marks on the paper
Do not make additional folds in the form
Example: Will marks made with a ball point pen be properly read? ○Yes ●No

Step 2: Using the code numbers which appear on the front of your booklet, fill in the coding blocks by darkening the appropriate circles. In addition, indicate the (a) grade level you teach, (b) total number of students for whom you are responsible, (c) month of the year you completed the form and (d) curriculum area for which you are responsible.

Step 3: Open the form and become familiar with the information you are to use to describe *each* instructional activity that is related to career education. As soon as you complete an instructional activity, complete the form by darkening in one circle in the appropriate space for each category. Each form allows you to describe twenty (20) different instructional activities. Use as many forms as are necessary to describe all of the career education activities in which you engaged this month.

Step 4: Indicate the number of minutes it took you to describe *each* instructional activity by darkening the appropriate circle.

Step 5: Review the form to make sure it is complete and properly filled out and then see to it that it gets to your director by the last day of each calendar month. NOTE: Do not make additional folds in the form.

Step 6: Repeat Steps 1-5 to describe the instructional activities for each calendar month.

This instrument was developed by Roy Thomas with technical consultation from Brandon B. Smith from the Minnesota RCU and the Vocational-Technical Division of the Minnesota State Department of Education for use with exemplary career education projects.

MINNESOTA RESEARCH COORDINATING UNIT
FOR VOCATIONAL EDUCATION
University of Minnesota ● Minneapolis, Minnesota

CHAPTER SEVEN

SELECTED CAREER EDUCATION BIBLIOGRAPHY

Julius H. Kerlan*

This section is designed to meet a recognized need for a bibliography on materials in the rapidly growing field of career education for the elementary teacher, the counselor, and the principal.

This part is divided into two sections, namely "Resources on Career Education," and an "Index of Publishers."

The first section, Resources on Career Education, is a bibliography which provides current information on career education materials: books, monographs, pamphlets, films, film strips, and tape recordings. These resource materials should enable educators to keep abreast of published career materials.

The second section is a selected list of publishers in this field who publish monographs, pamphlets, and booklets, with an emphasis on career education.

It is hoped that the material in these sections will enable all who use it to expand and improve the quality of career education program in the elementary school.

---

*Julius H. Kerlan is a Consultant, Pupil Personnel Services, Division of Instruction, Minnesota Department of Education.

Selected Career Education Bibliography

Academic Games Associates, 3505 North Charles Street, Baltimore, Maryland 21218 — *Life Career Games.* Boocock, Sarane, 1968; $10.00.

Allyn and Bacon, Inc., Rockleigh, New Jersey 07647 — *Career Information in Counseling and Teaching.* Lee E. Isaacson, 1971; $9.50.

American Personnel & Guidance Association, 5605 New Hampshire Avenue Northwest, Washington, D.C. 20009. *The Parents' Role in Career Development.*

American Vocational Association, Washington, D.C. *Career Development: K-14;* American Vocational Journal. Vol. 44, No. 9 (December, 1969), entire issue.

Appleton-Century-Crofts. *Theories of Career Development.* Samuel H. Osipow, 1968; $7.95.

California State Department of Education, Bureau of Pupil Personnel Services, Sacramento, California — *Career Guidance—A California Model for Career Development K-Adult;* 1971.

Chamber of Commerce, Washington, D.C. — *Education Projects for Business Organizations.*

Ferguson, J. G., Publishing Company, 6 North Michigan Avenue, Chicago, Illinois 60611, *The Encyclopedia of Careers and Vocational Guidance, Vol. I & II.*

Hawaii Department of Education, Office of Instructional Services, Honolulu, Hawaii — *Guidance Curriculum Guide: Career Development Intermediate Level,* 1971.

Hart Publishing Company, New York, New York — *Value Clarification, A Handbook of Practical Strategies for Teachers and Students.* S. B. Simon and L. W. Kirschenbaum, 1972.

Houghton-Mifflin Company, Geneva, Illinois 60134, *Decision-Making and Vocational Development.* Edwin L. Herr, 1970. Paperback $1.80.

Leslie Press, 111 Leslie Street, Dallas, Texas 25207. *World of Work: Handbook of Occupational Guidance in Elementary Grades.* Charletta J. Dunn and Bill T. Payne, 1971; $4.95.

Louisville Board of Education, Instructional Materials Center, Louisville, Kentucky. *The World of Work, Vocational Information in Elementary Schools.* Esther L. Bosswing, 1970.

Macmillan Company, 60 Fifth Avenue, New York, New York 10011. *Vocational Guidance and Career Development: A Book of Readings.* Herman J. Peters and James C. Hanson, Ed., 1971; $5.95 paperback.

McGraw Hill Book Company, New York, New York — *Career Guidance: Who Needs It, Who Provides It, Who Can Improve It?* Eli Ginzberg, 1971; $7.95.

McGraw Hill Book Company, New York, New York — *Occupational Information.* Third Edition, Robert Hoppock, 1967; $10.50.

Minnesota Department of Education, Pupil Personnel Services Section, Capitol Square Building, St. Paul, Minnesota 55101 — *A Resource Guide for Career Development in the Junior High School,* Arland Benson, 1972.

Minnesota Department of Education, Pupil Personnel Services, Capitol Square Bldg., St. Paul, Minn. 55101. *A Resource Guide for Career Education in Senior High,* Arland Benson, 1973.

Minnesota Department of Education, Pupil Personnel Services Section, Capitol Square Building, St. Paul, Minnesota 55101 — *Audio Visual Guidance Materials.* Truly Latchaw, 1969.

Minnesota Department of Education, Pupil Personnel Services Section, Capitol Square Building, St. Paul, Minnesota 55101 — *Career Charts,* 1971.

Minnesota Department of Education, Vocational-Technical Division, Capitol Square Building, St. Paul, Minnesota 55101 — *Career Development: An Understanding Plan and Work Packet for Educators K-12,* 1972.

Minnesota Department of Education, Pupil Personnel Services Section, Capitol Square Building, St. Paul, Minnesota 55101 — *The Minnesota Occupational Literature Filing Plan,* 1968.

Minnesota Department of Education, Pupil Personnel Services Section, Capitol Square Building, St. Paul, Minnesota 55101 — *The Teachers Role in Career Development,* W. W. Tennyson et al. (under revision).

National Vocational Guidance Association, 1605 New Hampshire Avenue Northwest, Washington, D.C. 20009 — *Bibliography of Current Occupational Literature,* 1973 (in print).

National Vocational Guidance Association, Washington, D.C. — *Career Guidance Practices in School and Community,* 1970; $3.95.

National Vocational Guidance Association, 1607 New Hampshire Avenue N.W., Washington, D.C. — *The Vocational Guidance Quarterly;* $4.00.

National Vocational Guidance Association, 1607 New Hampshire Avenue N.W., Washington, D.C. *Career Guidance Practices In School and Community.* Lorraine Sundal Hansen, 1970; $3.95.

Northern Michigan University, Marquette, Michigan. *National Seminar on Vocational Guidance.* Norman R. Gysbers, 1966.

New Jersey Department of Education, Trenton, New Jersey 08625 — *Career Development: Increasing the Vocational Awareness of Elementary School Children.*

Ohio State University, 1900 Kenny Road, Columbus, Ohio 43210. *Review and Synthesis of Foundations for Career Education.* Edwin L. Herr, Ed. (ERIC Clearinghouse on Vocational and Technical Education), 1972.

Oklahoma Department of Education, Oklahoma City, Oklahoma 73105 — *A Guide for Developmental Vocational Guidance K-12,* 1968.

Olympus Publishing Company, Salt Lake City, Utah — *Career Education and the Elementary School Teacher.* Kenneth Hoyt, Nancy Pinson, Darryl Laramore, and Garth L. Mangum, 1973.

Olympus Publishing Company, Salt Lake City, Utah — Career Education: *What It Is and How to Do It.* Kenneth Hoyt and others, 1972; $4.00.

Owatonna Public Schools, Owatonna, Minnesota 55060. *Career Awareness Guide* (Grades 1-6), 1971. Distributed by Minnesota Department of Education, Pupil Personnel Services.

Prentice Hall, Inc., Englewood Cliffs, New Jersey — *Reaching Out: Interpersonal Effectiveness and Self-Actualization.* D. W. Johnson, 1972.

Robbinsdale Public Schools, Robbinsdale, Minnesota — Hosterman Junior High School — *Career Development 7-8-9,* 1971.

Ronald Press Company, The, New York, New York. *Guidance Systems: An Introduction to Student Personnel Work.* Donald H. Blocker and others, 1971; $8.00.

Rosen, Richard Press, New York, New York. *New Dimensions in Elementary Guidance: Practical Procedures for Teachers, Counselors, and Administrators.* Martin L. Stamm and Blossom S. Nissman, 1971; $12.50.

Roseville Area Schools, Roseville, Minnesota 55113. *Career Development K-6 Resource Materials,* 1972. Distributed by Minnesota Department of Education, Pupil Personnel Services.

Seattle Public Schools, Seattle, Washington — Denny Junior High School, Grades K-9 — *Instructional Material Units — Career Oriented Education,* 1970.

Science Research Associates, Chicago, Illinois. *Occupational Information in the Elementary School,* Willis Norris, 1963.

Texas State Department of Education, Capitol Station, Austin, Texas 78711 — *Elementary Guide for Career Development* (Grades 1-6), 1970.

University of Southern Illinois, Carbondale, Illinois — *Career Development for Children Project.* Larry Bailey, 1969.

University of Southern Illinois, Carbondale, Illinois — *Facilitating of Career Development: An Annotated Bibliography.* Larry Bailey, ed., 1970.

University of Minnesota, Minneapolis, Minnesota — *EPDA: Career Development and the Elementary School Curriculum.* College of Education, 1971 (mimeographed); $2.00.

University of Minnesota, Minneapolis, Minnesota — *Suggested Teaching-Learning Approaches for Career Development in the Curriculum;* Tennyson, W. W. and Klaurens, Mary K., 1968 (mimeographed).

U. S. Government Printing Office, Washington, D.C. *Career Education,* 1971; 20¢ (Order No. NE5.280:80075).

U. S. Government Printing Office, Washington, D.C. *Career Education in the Environment: A Handbook.* Olympus Research Corporation.

U. S. Department of Labor, Washington, D.C. *Occupational Outlook Handbook.* Bureau of Labor Statistics, 1972; $6.25.

Wiley, John and Sons, New York, New York. *The Psychology of Occupations.* Ann Roe, 1956; $9.95.

Wiley, John and Sons, New York, New York. *Career Development: Growth and Crisis.* Arthur M. Kroll, 1969; $9.25.

The H. W. Wilson Company, New York, New York. *Occupational Literature: An Annotated Bibliography.* Gertrude Forrester, 1971; $15.00.

A Suggested List of Publishers of Career Education Materials

Academic Games Associates
3505 North Charles Street
Baltimore, Maryland 21218

Allyn and Bacon, Inc.
470 Atlantic Avenue
Boston, Massachusetts 02110

American Book Company
450 West 33 Street
New York, New York 10001

American Guidance Service
Publishers Building
Circle Pines, Minnesota 55014

American Personnel and Guidance Association
1605 New Hampshire Avenue Northwest
Washington, D.C. 20009

American Vocational Association
1510 H Street Northwest
Washington, D.C. 20005

B'Nai B'rith Vocational Services
1640 Rhode Island Avenue
Washington, D.C. 20036

Bobbs-Merrill Company, Inc.
4300 West 62nd Street
Inidanapolis, Indiana 44268

California State Department of Education
Bureau of Pupil Personnel Services
State Education Building
721 Capitol Mall
Sacramento, California 95814

Careers, Inc.
P.O. Box 135
Largo, Florida 33540

Chamber of Commerce of United States
1615 H Street Northwest
Washington, D.C. 20006

Chronicle Guidance Publications, Inc.
Moravia, New York 13118

Coronet Films, Inc.
65 East South Water Street
Chicago, Illinois 60601

Dodd, Mead and Company
79 Madison Avenue
New York, New York 10016

Doubleday and Company
School and Library Division
Garden City, New York 11530

Dutton, E. P., and Company
201 Park Avenue South
New York, New York 10003

Eden-Craft, Inc.
6475 Du Bois
Detroit, Michigan 48200

Educational Films Library Association, Inc.
250 West 57 Street
New York, New York 10019

Educational Resources Information Center
Clearing House on Counseling and Personnel Services
611 Church Street
Ann Arbor, Michigan 48104

Eye Gate House, Inc.
846-01 Archer Avenue
Jamaica, New York 11435

Ferguson, J. G., Publishers Co.
6 North Michigan Avenue
Chicago, Illinois 60602

Finney Company
3350 Gorham Avenue
Minneapolis, Minnesota 55426

Follett Publishing Company
1000 North Washington Boulevard
Chicago, Illinois 60607

General Electric
Educational Relations Service
1 River Road
Schenectady, New York 12300

General Motors Corporation
Public Relations Staff
Detroit, Michigan 48202

Grosset and Dunlap Publishers Co.
51 Madison Avenue
New York, New York 10010

Guidance Associates
Pleasantville, New York 10520

Harper and Row, Publishers
2500 Crawford Avenue
Evanston, Illinois 60201

Holt, Rinehart, and Winston
383 Madison Avenue
New York, New York 10017

Julian Messner
1 West 39th Street
New York, New York 10018

Alfred A. Knopf, Inc.
201 East 50th Street
New York, New York 10022

Lyons and Carnalian
Educational Division-Meredith Corporation
407 East 25th Street
Chicago, Illinois 60616

Manpower Administration
U.S. Department of Labor
Washington, D.C. 20210

McKnight Publishing Company
Route 66 and Towanda Avenue
Bloomington, Illinois 61701

Minnesota Department of Administration
Documents Section
Room 140 Centennial Building
St. Paul, Minnesota 55155

National Education Association
1201 16th Street Northwest
Washington, D.C. 20036

Newist
P.O. Box 7711
Green Bay, Wisconsin 54303

New York Life Insurance Company
Career Information Service
Box 51
Madison Square Station
New York, New York 10010

Oklahoma Department of Education
Oklahoma City, Oklahoma 73105

Prentice-Hall, Incorporated
Englewood Cliffs, New Jersey 07632

Putnam's, G. P., Sons
200 Madison Avenue
New York, New York 10016

Harcourt, Brace, and Javonich, Inc.
757 Third Avenue
New York, New York 10017

Hawaii Department of Education
Office of Instructional Services
Honolulu, Hawaii 96804

Houghton-Mifflin Company
2 Park Street
Boston, Massachusetts 02107

Charles A. Jones Publishing
4 Village Green Southwest
Worthington, Ohio 43085

Lippincott, J. B., Company
East Washington Square
Philadelphia, Pennsylvania 19105

McCormick Mathers
300 Pike Street
Cincinnati, Ohio 04473

McGraw-Hill Book Company
330 West 42 Street
New York, New York 10036

Minnesota Department of Education
Pupil Personnel Services Section
Division of Instruction
Capitol Square Building
St. Paul, Minnesota 55101

Minnesota Department of Manpower Services
390 North Robert Street
St. Paul, Minnesota 55101

National Vocational Guidance Association
1607 New Hampshire Avenue Northwest
Washington, D.C. 20009

New Jersey Department of Education
Trenton, New Jersey 08625

Occupational Outlook Service
Bureau of Labor Statistics
U.S. Department of Labor
Washington, D.C. 20212

Olympus Publishing Company
Salt Lake City, Utah 84111

Public Affairs Pamphlets
381 Park Avenue South
New York, New York 10016

Random House School and Library
201 East 50th Street
New York, New York 10022

Richard Rosen Press, Inc.
29 East 21st Street
New York, New York 10010

Ronald Press Company
79 Madison Avenue
New York, New York 10016

San Diego County Department of Education
Audio Visual Service
San Diego, California

Scribner's, Charles, Sons
597 Fifth Avenue
New York, New York 10017

Seattle Public Schools
Seattle, Washington

Silver Burdett Company
Park Avenue and Columbia Road
Morristown, New Jersey 07960

Texas State Department of Education
Capitol Station
Austin, Texas 78711

University of Wisconsin-LaCrosse
Film Library, A-V Center
LaCrosse, Wisconsin 54601

Vocational Films
111 Euclid Avenue
Park Ridge, Illinois 60068

Western Publishing Company
850 Third Avenue
New York, New York 10022

World Book Encyclopedia
Merchandise Mart Plaza
Chicago, Illinois 60654

Robbinsdale Public Schools
Robbinsdale, Minnesota 55427

St. Paul Public Library
90 West Fourth Street
St. Paul, Minnesota 55102

Science Research Associates
259 East Erie Street
Chicago, Illinois 60611

Sears Roebuck Foundation
7435 Skokie Boulevard
Skokie, Illinois 60076

Sextant Systems, Inc.
3048 North 34th Street
Milwaukee, Wisconsin 53210

Simon and Schuster, Inc.
630 Fifth Avenue
New York, New York 10020

University of Minnesota
Department of Audio-Visual Extension
2037 University Avenue Southeast
Minneapolis, Minnesota 55455

U. S. Government Printing Office
Superintendent of Documents
Washington, D.C. 20402

Vocational Guidance Manuals
235 East 45th Street
New York, New York 10017

Wisconsin Department of Public Instruction
126 Langdon Street
Madison, Wisconsin 53702